

# **The Amami Island Group Symbiotic Society Plan (Excerpt)**

## **Part 3: Basic Policy**

### **Chapter 1: Basic Concept**

This “Plan” proposes regional development by “symbiosis with human beings and nature” as the mainstay based on the idea of transforming conventional standards, aiming at revitalization of local communities, namely setting principles as “transformation of our lifestyle to a symbiosis society with nature”, “transformation towards regional diversity”, and “transformation of initiatives from national level to local level”. Based on the current situation of the Amami Island Group, the Plan indicates a new way of “symbiosis with human beings and nature” in the Islands.

In order to discover a new way of “symbiosis”, the Plan sets basic policies to take measures based on “conservation of biodiversity” and “interaction with nature” with the Amami Island Group’s “treasures” as a core. The Amami Island Group’s “treasures” on the Plan are defined as regional resources having academic and social value of nature, which the local residents of the Amami Island Group explored during “treasure hunting” that they independently undertook. Measures on the “Plan” show direction of appropriate usage according the value of the “treasures” of the Islands that local communities autonomously discovered.

These basic concepts intend to allow local communities to recognize the value of local natural environments and use them subjectively by themselves. By experiencing recognition and utilization repeatedly, the connection between human beings and nature is expected to be better and deeper in the Amami Island Group and become worthy to be called the “symbiosis society with human beings and nature”.

## **Chapter 2: “Treasures ” of Amami**

### **Section 1: Overview**

#### **1. “Treasure Hunting” in the Amami Island Group**

When the Plan started to be formulated, local communities of 14 cities, towns and villages of the Islands participated in “treasure hunting” in cooperation with local residents and administrative organizations. The activity of “treasure hunting” offers local residents to independently reaffirm and rediscover “treasures” buried in each region.

The “treasure hunting” has significance to raise public awareness of local people’s pride and identity; namely, as the traditional connection between human beings and nature is weakening due to socio-economic change, this activity provides a chance for local residents to positively realize the value of the connection again.

At the same time, this activity is meaningful as basic research for planning and operating measures in accord with the Plan; as the result of “treasure hunting”, each local community discovered various “treasures”, which will be subject to a variety of measures to be planned and implemented.

#### **2. “Treasures” of Amami**

The “treasure hunting” has unearthed many “treasures” of the Amami Island Group such as nature, history, culture, lifestyle, masters, and industries. All have diverse values in each area, but some of “treasures” can be specified as remarkable assets having representative and universal values for the whole island chain. Ecosystems of coral reef and marine life, coastal landscapes, and forestry ecosystems and landscapes consisting of natural fauna and flora can be identified as natural environments with remarkable academic value; nearby nature and landscapes can be categorized as nature with outstanding social value; furthermore, culture and industries which deeply relate to such kinds of nature, for example, religion, traditional events, island folk songs, and food materials can be included as “treasures”.

## **Chapter 3: Management of “Treasures” of Amami**

### **Section 1. Overview**

Development of regions with the Amami Island Group’s “treasures” as a core shall be proceeded through proper management so as to harmonize nature and society with each other.

Management of “treasures” should be based on conservation and utilization of them. Recognition of the academic and scientific values of “treasures” will allow appropriate maintenance. After conserving them like this, they will be utilized in various ways as resources of revitalization of regions. Premising that conservation will protect the values of them as resources of regional development, they will be able to be utilized in a sustainable manner.

Conservation and utilization shall be integrally promoted. Promotion of only one of them might cause imbalance between nature and society, namely “symbiosis with human beings and nature” in the future. Neither utilization setting aside conservation, nor conservation without consideration of possibility provided by utilization will not be suitable for “symbiosis with human beings and nature”.

Each relevant entity shall correctly recognize challenges regarding conservation and utilization of the “treasures”, and make decisions with coordination of multiple stakeholders to implement efficient measures and actions; it is also important to develop a base for information, systems and facilities to respond to these demands.

## **Section 2: Conservation of “Treasures”**

### **1. Basic Concept**

Conservation of “treasures” means to maintain good condition without damage to the values of the “treasures” by placing positive influence on the “treasure” and reducing negative impacts to them. Several methods of conservation measures and policies can be enumerated, such as protection of important targets, measures against influence factors, and development of bases for conservation (accumulating and disseminating information, system development, and facility development). The value of “treasures” and characteristics as resources is required to be incorporated to measures and policies by means of each direction and various methods associated with the directions.

### **2. Direction of Conservation**

Taking into account of the values of “treasures”, it is important to properly select and combine the following methods depending on the characteristics of “treasures” and situations around them.

#### **(1) Protection of Important Targets**

The “treasures” shall be utilized in many ways. They support local communities in the Amami Island Group and have a great effect on local people. As long as they are utilized in a proper way, there is no problem, however, the method of utilization may unexpectedly cause damage to the value of “treasures” and creating difficulty in maintaining sustainable utilization in the future. Important targets should be conserved in accordance with laws and ordinances for protection.

#### **(2) Measures against Influence Factors**

In the case that the value of “treasures” would be damaged by various socio-economic activities and natural phenomena besides direct utilization of them, it is necessary to specify the influence factors and take appropriate measures.

#### **(3) Promotion of Management**

Some type of “treasures” may need proactive human intervention in the form of operation management and maintenance to protect the value. Management would be promoted in order to conserve such “treasures”. Basically, an owner of a treasure is required to protect it with the proper methods, depending on the characteristics.

#### **(4) Development of Bases for Conservation**

Efficient conservation may require development of bases of information, systems, and facilities to support measures and actions of conservation.

Corresponding to concrete measures, capacity building of relevant entities, fulfillment and enhancement of

information and facilities may be enumerated.

#### **(5) Regeneration of “Treasures”**

Conservation of “treasures” aims to keep a good condition of them based on the current situation, however, if a “treasure” would be lost, it is necessary to restore, recover, and recreate it by implementing appropriate measures and activities.

#### **(6) Consideration to “Treasures”**

Consideration to “treasures” is generally required to all socio-economic activities even if the activities do not need to directly utilize the “treasures”.

### **Section 3: Utilization of “Treasures”**

#### **1. Basic Concept**

Utilization of “treasures” means to properly use them and connect the value of them with vitalization of local communities.

As examples of utilization, use as resources for tourism, food, and industrial products can be listed. Each of them is inevitable for local communities. However, inappropriate utilization might cause damage of the value of “treasures” and create difficulty in maintaining sustainable utilization in the future.

Elaborating on the forms of utilization and proper use can reduce such kinds of risk. For example, as resources for tourism, they can be used in eco-friendly learning tours (eco-tours); branding can enhance the value of them when they are used as materials of food and industrial products.

Several directions of measures and actions for utilization can be enumerated, such as presentation of concepts, formulating concrete efforts in accordance with the concept, and development of bases for utilization (accumulating and disseminating information, system development, facility development). These directions are required to be incorporated to measures and policies depending on the forms of utilization.

#### **2. Direction of Utilization**

Taking into account the conditions of utilization, it is important to properly select and combine the following methods:

##### **(1) Presentation of Concepts**

Concepts of utilization shall be clearly displayed as indicators in a manner in which various entities in local communities can elaborate on forms of utilization and promote appropriate use.

As premises of which the “treasures” are surely protected, the concept should be presented to enable two factors for harmonizing with each other; namely, on one hand economic benefit derived from utilization of

“treasures” is returned to local communities, and on the other hand utilization of “treasures” does not damage the connection between human beings and nature in local regions as well as residents’ lifestyle, culture, and identity.

It is crucial that responsible authorities take initiative to show the concept depending on the forms of utilization.

## **(2) Concrete Efforts**

It is important that various relevant entities such as administrative offices, private companies, regional NPOs, and local residents discuss original and effective methods of utilization, incorporate ideas make to concrete effort, and proactively implement them.

## **(3) Development of Bases for Utilization**

Efficient utilization may require development of bases of information, systems, and facilities to support measures and actions of utilization. Corresponding to concrete measures, capacity building of relevant entities, fulfillment and enhancement of information and facilities may be enumerated.

## **Part 4: Specific measures**

### **Chapter 3: Conservation of Forest and Endangered Wild Fauna and Flora**

#### **Section 1: Basic Concept**

Diverse ecosystems established in the Amami Island Group, where various kinds of fauna and flora inhabit, and especially endangered wild species such as *Pentalagus furnessi* or Amami Rabbit have an extremely high academic value. Subtropical broad-leaved forests left in the Amami Island Group, which are close to natural vegetation, are not only valuable itself, but also precious as the main habitats of endangered species. In addition, such subtropical broad-leaved forests grow in quantity and form the endemic and significant landscape.

In this context, endangered wild fauna and flora as well as forests in the Amami Island Group are of paramount importance for the “treasures” of the Amami Island Group, which shall be subject to the promotion of integrated measures of conservation.

#### **Section 2: Implementation of Measures**

##### **1. Protection of Important Targets**

Focusing on area and species will institutionally protect habitats of endangered wild species and subtropical broad-leaved forests, which are important for conservation of biodiversity and landscapes. Various institutional schemes are available for protection, and these schemes will be properly combined and enhanced to sufficiently ensure the protection of important targets.

##### **(1) Designation of Natural Parks and Wildlife Protection Areas**

Protection areas such as National Parks and Wildlife Protection Areas play an important role in the conservation of paramount regions of habitats of endangered wild species and forests.

Currently the Amami Islands Quasi-National Park (496.0ha as the Special Protection Zone; 446.0ha for Marine Park; 7,332.0ha as the Special Zone, 24,611.0ha as the Ordinary Zone) is designated in accordance with the Natural Parks Act. Activities such as building construction, cutting down trees or bamboo, and collecting of animals and plants are prohibited in each category of protection zone.

Mt. Yuwandake National Wildlife Protection Area (320ha) is designated based on the Wildlife Protection, Management, and Proper Hunting Act (Wildlife Protection Act), and a part of the area is designated as a Special Protection Zone (103ha). Additionally, prefectural protection areas are set in 5,208ha in a total in 23 areas. Hunting of wildlife is prohibited in the Wildlife Protection Area.

From the viewpoint of conservation of biodiversity and landscapes, however, designated places and areas do not necessarily match the current status. The Review Committee on Candidate Natural Sites for Nomination to the World Heritage List held in 2003 pointed out that protection measures were not

sufficient in some parts of important areas including habitats of endangered wildlife.

Protection measures suited to characteristics of targeted areas shall be enhanced more in the existing Protection Areas designated by the Natural Parks Act and Wildlife Protection Act; particularly in protection areas including habitats of endangered wildlife shall be expanded; more protection areas under the responsibility of the national government will be subject to new designation as National Parks.

## **(2) Measures based on the Act on Conservation of Endangered Species of Wild Fauna and Flora, and Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima**

The Act on Conservation of Endangered Species of Wild Fauna and Flora (Act on Conservation of Endangered Species) and the Ordinance to Protect Endangered Wild Fauna and Flora are important to avoid extinction of endangered wildlife.

Concerning the Act on Conservation of Endangered Species, 8 fauna and flora populating the Amami Islands (*Luscinia komadori* or subspecies of Ryukyu Robin; *Scolopax mira* or Amami woodcock; *Zoothera dauma major* or Amami thrush; *Dendrocopos leucotos owstoni* or Amami Woodpecker; *Garrulus lidthi* or Amami Jay; *Polystichum obai*; *Liparis elliptica*; *Vaccinium amamianum*) are designated as domestic endangered wild species, in which hunting and transfer are controlled; 2 species out of the eight (Amami woodcock and Amami thrush) are subject to the Program for the Rehabilitation of Natural Habitats and Maintenance of Viable Populations. These measures will be enhanced.

In 1999, The Kagoshima Prefectural Government started a research project of endangered wild species, and summarized the results in the Red Data Book of Kagoshima published in March 2003 including the list of endangered wild species in the Amami Islands. In the same month, the prefectural government also established the Ordinance to Protect Endangered Wild Fauna and Flora in Kagoshima; species subject to protection will be designated in order to control hunting and transfer based on the ordinance.

Yamato Village also established the Ordinance to Protect Endangered Wild Fauna and Flora, and implements measures to designate protection areas to 98 endangered wild species. Measures in accordance with these acts and ordinances shall be further enhanced from now on.

## **(3) Measures based on the Act on Protection of Cultural Properties and Ordinance of Protection of Cultural Properties of Kagoshima Prefecture**

The Act and Ordinance of Protection of Cultural Properties take a role of conservation of endangered wild species by designating animals and plants that have academic value and their habitats as Natural Monuments.

Currently the Act on the Protection of Cultural Properties designates the Amami Rabbit as a Special Natural Monument of the Japanese government, and animals and plants including *Tokudaia osimensis*, *Diplothrix legata* or Ryukyu Long-furred Rat, Ryukyu Robin, Amami Thrush, Amami Woodpecker, Amami Jay, and *Coenobita cavipes*, as well as natural forests in Kamiya and Yuwandake, are designated as Natural Monuments. In 2003, *Odorrana splendida*, *Echinotriton andersoni*, and *Goniurosaurus kuroiwaie splendens* were designated as Prefectural Natural Monuments. Municipal governments manage these species and control changes of the current status and actions that would influence conservation.



The proper management of the Act on Protection of Cultural Properties will continue to be maintained.

## **2. Measures against Influence Factors**

Some introduced species were found in a part of the Amami Island Group that greatly impacts native ecosystems including endangered wild fauna and flora.

There is a concern that native and endangered species may be hunted and eaten by introduced species such as mongoose on Amami-Oshima Island, feral cats and dogs, and *Mustela itatsi*. It is anticipated that native species (*Tokudaia osimensis* and Ryukyu Long-furred Rat) may be reduced by competition with *Rattus rattus* or black rats. It is pointed out that there is a risk of genetic invasion to native insects by hybridization with introduced species. Moreover, 70-130 species (varies depending on each island) out of 1,300-1,500 species of vascular plants populating in the Amami Islands are introduced from outside, and may have a negative impact on native species.

While the Amami Island Group contains the habitats of endemic and endangered species, the region is subject to be exposed to introduced species, which requires integrated measures against introduced species including prevention of invasion, controlling species after establishment, and monitoring, in collaboration with the national government.

To prevent dogs, cats, and goats from entering habitats of endangered wild species, proper management of those animals shall be enhanced, and careless releasing of animals will be controlled by appropriate measures. The current status of species such as boars, which are already established in Okinoerabu Island will be researched to consider targets of control, and measures of elimination and containment will be taken in proper way.

It is particularly clear that mongoose established in the Amami Islands have a devastating effect on endangered wild species, thus the national government has already undertaken the project of elimination of mongoose. From now, measures of complete elimination will be continued and further enhanced by introducing more effective ways of hunting.

## **3. Promotion of Management**

Management of operation and maintenance in protection areas will be properly implemented to conserve forests and endangered wild fauna and flora.

Forests in the Amami Island Group are categorized as “Forests for Water and Soil Conservation”, “Forests for Symbiosis of Forest and People”, and “Forests for Cyclical Use of Forest Resources” according to each preferential function. In the “Forest for Symbiosis of Forest and People”, in particular, management for conservation will be promoted based on natural transition and operation dealing with single-stored forest and uneven-aged forest. National Forests in Amami-Oshima Island and Tokunoshima Island will be necessary to be properly managed according to the current classification of protected forests.

## **4. Development of Base for Conservation**

**(1) Scientific Investigation and Research**

An inventory (a list of species) will be compiled by implementing investigation from a scientific viewpoint to continuously accumulate information of distribution, population and density of specific species.

**(2) Participation of Various Entities**

Participation and consensus building with local communities may be required for conservation of endangered wild species as necessary. Especially various entities will be encouraged to participate in the initiatives related to control of introduced species such as mongoose.

**(3) Function as a Hub of the Amami Wildlife Center**

The Amami Wildlife Center owned by the national government was opened in 2000, and the function of the center will be enhanced regarding research projects of endemic ecosystems in the Amami Island Group, in addition to accumulation and dissemination of related information.

## **Chapter 8: Intensifying Consideration to Nature**

### **Section 1: Basic Concept**

The awareness of local residents living in each region in the Amami Island Group is important to inherit the “treasures” of Amami such as nature in the Islands that is valuable to the world. In other words, residents are required to proactively play a main role to create a unique and symbiotic society of people and valuable nature in the Amami Island Group. As a base of regional development, residents need to take the initiative in basic living activities and each kind of project in order to consider nature by energy saving, reducing waste, and controlling living wastewater.

Concerning the general socio-economic activities in the Amami Island Group, impact on “treasures” shall be appropriately controlled with the consideration not to harm the value of them when implementing measures, projects, and industrial activities.

### **Section 2: Implementation of Measures**

#### **1. Consideration by Residents**

##### **(1) Ways of Consideration by Residents**

The Kagoshima Prefectural Government is implementing the “Citizen’s Eco-Friendly Activity in Kagoshima”; three initiatives of development of eco-friendly lifestyles, regional development in harmony with environment, and social system development based on circulation are being operated by the “Conference for Citizen’s Eco-Friendly Activity in Kagoshima” as a promotion center.

It is desirable that circulation is independently established in each island as much as possible because the Amami Island Group consists of independent islands. Residents in each local community are expected to proactively work on energy saving, reducing waste, conserving water, conserving the natural environment, participating in environmental conservation activities, and properly treating waste.

##### **(2) Measures to Support Consideration by Residents**

To support such activities of consideration by residents, measures relating to waste management will be promoted; in addition to control of generation of waste, promotion of recycling, facility development to ensure the proper treatment of waste, and measures against illegal dumping.

Setting designated collection sites and developing a system of collection and transfer will enhance recycling of home appliances. Recycling of automobiles will also be properly implemented.

Several other measures will be also implemented: facility development for water and sewage, wastewater from agricultural and fishery activities, a combined sewage treatment tank, as well as introduction of new energy resources such as wind and solar power.

## **2. Consideration upon Implementation of Industrial Activities**

### **(1) Environmental Assessment**

As it is crucial for environmental conservation that the environmental assessment is preliminarily undertaken to the “treasures” before implementing projects, the Environmental Impact Assessment Laws of both the national government and the prefectural government will be continuously operated in the proper way.

### **(2) Promotion of Environmentally-Friendly Public Projects**

When a public project is anticipated to have an impact on the “treasures” but necessary to be implemented for socio-economic reasons, it is important to reduce the impact as much as possible. The “Opinion Survey” shows 73% of residents responded that public project shall be implemented with due care to natural environments”. In this regard, public projects will be encouraged to be implement in an environmentally friendly manner.

Public projects for roads, rivers, ports and harbors, and development of agriculture as well as agricultural villages have been implemented with care to natural environments. Development of agriculture and agricultural villages has been also promoted in an environmentally friendly manner. Forests are being treated to demonstrate their multiple functions. Forest roads are being developed with care for conservation of landscapes and ecosystems; National Route 58 was designated as an “eco-road” with consideration for the ecosystem, and tunnels and bridges are constructed so as not to separate ecosystems; cross paths along the route are built for animals.

The “Development of Multi-Natural Rivers” project is promoted for the development of rivers such as the Yakugachigawa river; environmentally friendly efforts including conservation of diverse watersides, making of green slopes on river banks, development of facilities excellent in hydrophilicity, and construction of revetment with natural stones are being incorporated to each project.

The “Review Committee for the Natural Environment for the Construction of the Yamato Dam” promotes the dam construction as a reservoir of living water in an environmentally-friendly manner. Projects for prevention of soil erosion are implemented with consideration for the environment of streams. Green slopes on revetments are developed with consideration for hydrophilicity at ports and harbors. Around the ports and harbors, trees and plants of native species are used for development of green areas.

Projects will be implemented in an environmentally-friendly manner continuously from now on such as: development of roads and multi-natural rivers with care to habitats of endangered wild species in the Amami Island Group, setting of fishways, blowing seeds of native species to slopes; skills and technologies with consideration to natural environments will be introduced based on the features of nature in the Amami Island Group.

Regarding housing, environmentally symbiotic houses will be developed and supported by both public and private sectors based on the climate in the Amami Island Group, for the purpose of the conservation of the global environment such as energy saving and resources.

### **(3) Promotion of Environmentally Friendly Agriculture**

Productive activities, which may have an impact on the “treasures”, will be also operated while avoiding impact.

Regarding agricultural production, “environmentally friendly agriculture”, namely sustainable agriculture will be promoted with consideration both to utilizing the function of natural circulation provided by agricultural activities and to reducing the impact on environments. As it is difficult to recover the valuable nature in the Amami Island Group such as endangered species if it is once lost, agricultural production will be promoted with special care for the environment.

With respect to environmentally-friendly agriculture, various measures will be further promoted aiming at “development of environmentally friendly production centers” for reducing environmental impact: facility development for compost, production, transportation and utilization of quality compost by securing composting materials, land reform by subsoil plowing and breaking, proper fertilizing based on soil assessment, proper control on pests based on prevention measures, proper treatment of agricultural waste plastics.

Concerning environmentally friendly stock farming, management of livestock excrement, required technologies for treatment, and circuit teaching will be enhanced; treatment facilities of livestock excrement will be developed in accordance with the current situation of each region based on the Plan for Utilization of Livestock Excrement in Kagoshima Prefecture”.

### **(4) Measures to Prevent Erosion of Red Soil**

There is a concern of environmental impact caused by the erosion of red soil to rivers and the sea along the coastline of the Amami Island Group at each kind of development; measures to prevent red soil erosion are now implemented based on the “Keys of Prevention of Soil Erosion” (by municipal offices), Measure of Prevention of Red Soil Erosion of the Oshima Sub-prefectural Office (by the prefectural government), and the Practice Standard of Soil Erosion by Development and Construction Projects in Tokunoshima Island (by the national government). Grit tanks will be set at each project, and research and investigation will be promoted.

## **Chapter 9: Efforts for Inclusion to the World Natural Heritage List**

### **Section 1: Basic Concept**

The World Heritage Convention is an international agreement to protect and conserve natural heritages and cultural properties having “Outstanding and Universal Value”. On the other hand, it also attracts attention as a measure of regional activation such as sight seeing and contribution to identity in each region.

The Amami Island Group has unique natural environments including subtropical broad-leaved forests, endemic and endangered wild fauna and flora, and coral reefs with rich diversity. These “treasures” of Amami are highly valuable throughout the world; and the Review Committee on Candidate Natural Sites for Nomination to the World Heritage List held in 2003 chose the Islands as one of the regions that have great potential to meet the requirements for inclusion to the List as regulated by the World Heritage Convention.

Inclusion to the List requires setting a framework of conservation and utilization of the “treasures”, thus consensus building with local residents will be the keys as they are regarded as the main entities of conservation and utilization. The “Opinion Survey” indicates that many natives and inhabitants of the Amami Island Group support the Inclusion to the List based on consensus with residents.

In this context, efforts aiming toward Inclusion to the List will be positively promoted.

## **Section 2: Implementation of Measures**

### **1. Measures to Ensure Conservation**

#### **(1) Necessity of Measures to Ensure Conservation**

For inclusion to the List, the World Heritage Committee examines properties nominated by countries with criteria of natural features including topography, soil type, ecological system, and biodiversity. Besides these criteria, it also requires that a property must have a measure to ensure its protection not to damage the value based on laws and regulations. Namely, no matter how valuable a property is, it is not included to the World Heritage List without sufficient measures to inherit the value in the future.

The Amami Island Group sufficiently meets the criteria of natural features; the Review Committee acknowledged that the Ryukyu Chain including the Amami Island Group meets the standard criteria of topographic feature of an arc-trench system, ecosystem widely and mutually related to subtropical broad-leaved forests and coral reefs, and diverse beauty of landscapes. The committee also pointed out that the endangered wild fauna and flora including endemic species is especially valuable as the center of a World Natural Heritage Site.

On the other hand, however, the committee indicated that it requires setting of more protection areas for habitats of endangered wild species regarding measures to ensure conservation based on laws and regulations.

Therefore, in order to aim toward inclusion as a World Natural Heritage Site, it is necessary to provide satisfactory measures to ensure conservation from the viewpoint of biodiversity for important areas, in particular habitats of endangered species.

#### **(2) Discussion on Measures to Ensure Conservation**

Inclusion to the Lists requires; firstly, institutional establishment of protected areas with a certain level of areas of effect in important regions, and secondly, establishment of management plans regarding such protected areas.

Concerning establishment of protected areas, areas subject to protection will be identified, and existing protected areas will also be reviewed and expanded. Protected areas such as National Parks for which the national government is responsible will be designated by the national government.

To realize the integrated management of regions subject to the properties, national, prefectural, and municipal organizations will work cooperatively and management plans will be formulated in collaboration with each other. The management plans will include management policies, establishment of protected areas, management systems such as liaison committees, and management projects such as restoration of nature.

### **2. Development of Base for Inclusion**

#### **(1) Collaboration of Various Entities**

Efforts for inclusion to the World Natural Heritage List shall be promoted not only at the national level, but

also prefectural, municipal, and community levels, with collaboration with various and diverse entities. As the Review Committee selected the candidate site including Okinawa Island Group, collaboration with Okinawa Prefecture will be the key of implementation of such efforts.

To ensure the collaboration of various entities, a liaison committee will be formed to discuss operational aspects of actions for inclusion. Consensus building with local communities will be promoted through workshops with participation of local NPOs and residents as well as open learning courses of nature in the Amami Island Group.

## **(2) Promotion of Investigation and Research**

Scientific information about nature in the region is inevitable to promote the inclusion to the World Natural Heritage List. Investigation and research activities will be encouraged to gather information about nature in the Amami Island Group; study groups consisting of experts will be established.

## **(3) Promotion of Exchange and Dissemination of Information**

Symposiums will be held with participation widely from both inside and outside the Islands to implement opinion exchange with other domestic regions and international exchange regarding efforts for inscription to the World Natural Heritage and display of measures after inscription. As conservation and utilization of natural environments will require proactive participation of local communities, local residents' opinions will be positively encouraged to be disseminated at such conferences.

## **(4) Expectation for Residents as the Main Actor**

It is anticipated that implementation of efforts for inscription to the World Natural Heritage Sites will activate exchange with parties outside the Islands, and opportunities to attract attention from outside will increase. From the viewpoint of those outside the Islands, it is important to maintain landscapes and scenery suited to the World Natural Heritage Sites in the non-protection areas. Attracting attention from outside the Islands will raise residents' awareness, and it is expected that it will stimulate motivation towards inclusion to the World Natural Heritage Sites.

Based on these circumstances, development of landscapes and sceneries suitable to the World Natural Heritage will be promoted through efforts with residents' positive participation.