

# Chapter Two

## Aiming at a Sustainable Society through Local Actions

### <Summary of Chapter Two>

Local communities are closely intertwined with our day-to-day living. This is why we can see relatively easily the environmental load, its impact, and results that may be gained by taking actions. Therefore, the community is a place where we can obtain a comparatively good grasp of environmental issues and make voluntary efforts to conserve the environment. This chapter describes the conditions necessary to make our efforts in local communities effective, and how such endeavors help reinvigorate the area and become the driving force behind a shift toward a sustainable society.

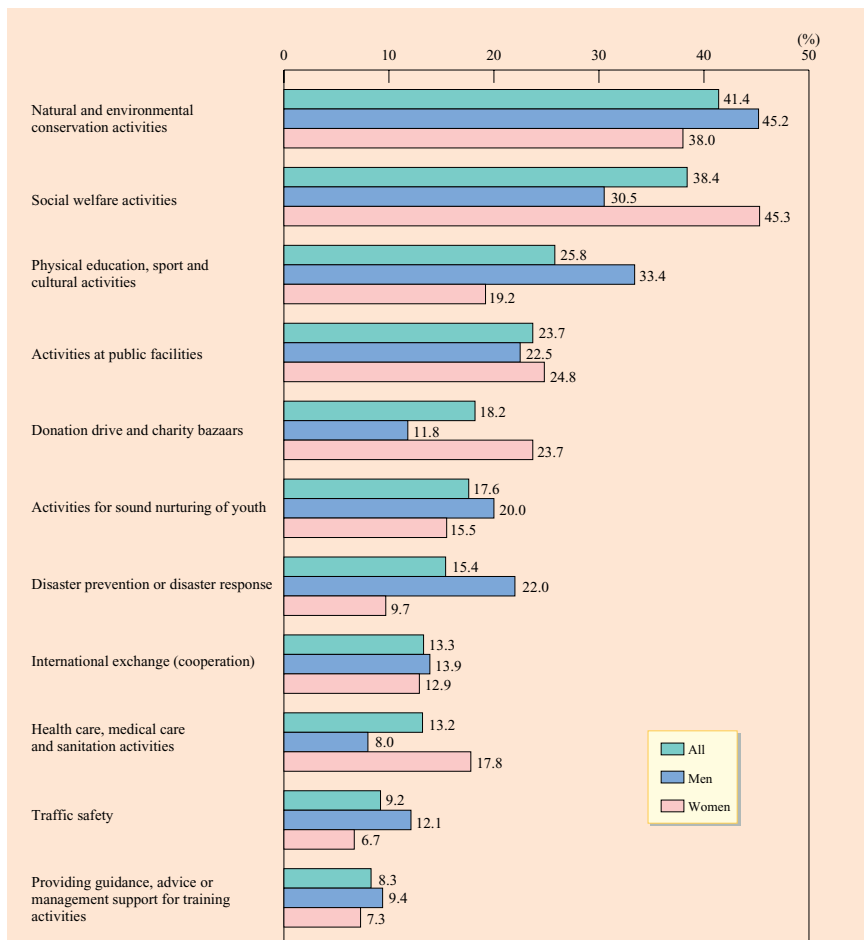
## Section 1: Environmental Conservation Efforts in Local Communities

### 1. Environmental Conservation Efforts Being Active in Local Communities

People are placing greater emphasis on spiritual richness and becoming increasingly interested in contributing to society. Against this backdrop, signs have pointed to a growing movement in the environmental arena to go beyond just practicing environmental conservation measures in one's daily life to becoming more involved in environmental conservation efforts through volunteer activities and participation in NPO activities, neighborhood associations and community associations. Many such activities are characterized by their orientation toward community-level endeavors to improve the immediate surroundings or to be active in the neighborhood.

Likewise, businesses, their trade associations, consumers' cooperatives and agricultural cooperatives have begun to show a growing interest in local communities. Motivated by the idea that fulfilling social responsibilities helps earn higher public esteem, many of these businesses have begun voluntary

Preferred Volunteer Activities



Notes:

1. The results are taken from the respondents that replied "Yes" or "If I have a chance" to the question "Do you want to participate in volunteer activities?" The percentage is the ratio of responses (multiple responses) in answer to the question "Of the following activities, which would you like to participate in? Please select all that apply."

In addition to the above choices, 1.5% answered "Other" and 1.2% did not answer.

2. There were 2,580 respondents.

Source: FY 2000 Survey on National Lifestyle Preferences (December 2000), Cabinet Office

environmental conservation efforts and to work toward reducing the environmental load from their business activities.

In recent years, various actors have become increasingly active in community-based environmental conservation activities.

## 2. Historical Development of Environmental Conservation Activities in Local Communities

From the middle of the Meiji era to the early Showa era, measures against mine pollution were limited to out-of-court settlements, compromise or relocation of the injured party. Pollution was treated as a local issue, confined to specific areas.

As pollution spread across Japan during the period between 1945 and 1965, antipollution campaign organizers in different areas came to cooperate and it made the entire nation realize that drastic pollution control measures were needed along with economic growth. At that time, local antipollution initiatives played a leading role on the pollution control front, as exemplified by the enactment of pollution control ordinances by local governments.

As urban and domestic pollution became more noticeable in the decade following 1975, the traditional pattern of local residents confronting industries shifted to a movement to review the environmental load for which residents themselves were responsible. One such example was the Citizen Campaign for Using Soap Instead of Synthetic Detergent initiated by residents in adjacent areas of Lake Biwa. Japan at that time required not only pollution prevention efforts but also measures to increase the amenities provided by the local environment. This decade witnessed the introduction of the national trust movement that originated in England. The movement purchases land to be preserved with money collected from a broad base of citizens through fund-raising campaign.

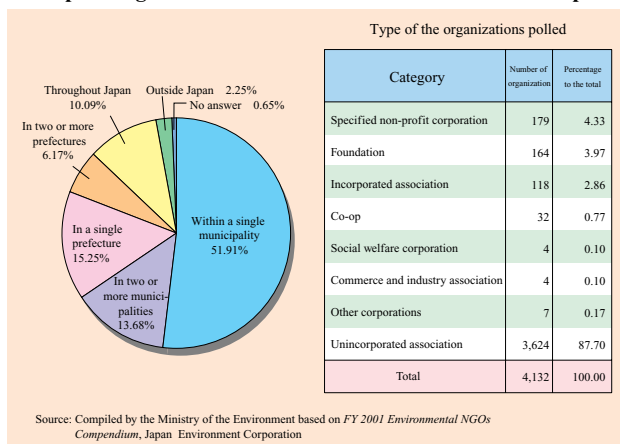
Since 1985, the issues of waste, recycling and the global environment have become a major concern, and there has been a growing public awareness that voluntary efforts at a community level is vital because the cause and solution of environmental problems are linked directly to the life of an individual. There has also been a surge in cases where different actors in the area make united efforts to tackle waste and recycling problems. Partnerships were formed between cities and agricultural villages mediated by material circulation. Also, programs that seek to improve the environment and work toward a sustainable society have gained momentum.

When we look back on the history of local environmental conservation efforts in Japan, it is apparent that local initiatives have played a pivotal role in the nation's efforts to conserve the environment.

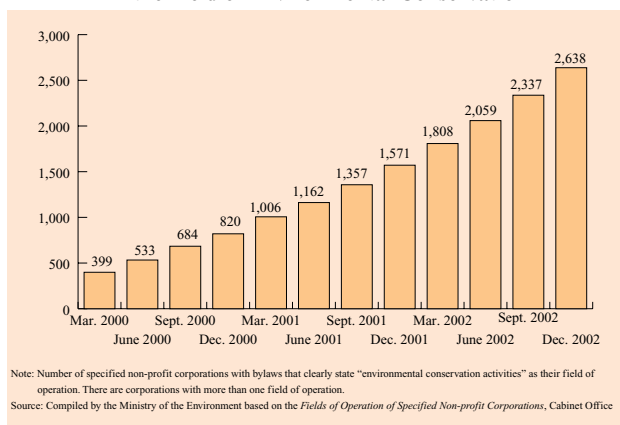
## 3. Internationally Mandated Local Efforts (from "Local Agenda" to "Local Action")

Agenda 21, adopted at the 1992 Earth Summit, mandated local governments to formulate a Local Agenda 21, an action plan to achieve a sustainable society. The Johannesburg Summit held in 2002 issued a declaration to promote Local Action 21 to translate the measures adopted by Local Agenda 21 into specific actions. This adoption attests to the international recognition of the importance of initiating actions in local communities, on a daily-life level.

### Operating Areas of Environmental Conservation Groups



### Number of Specified Non-profit Corporations Working in the Field of Environmental Conservation



## Chronology of Events Related to Environmental Conservation Efforts

Year	Events	Orientation of activities
1887–1906	• Copper poisoning incident occurred at Ashio copper mine	Protest against industrial pollution
1951	• Deterioration of water quality in areas surrounding paper mill factories began to attract public attention	
1955	• First case of “Itai-itai” disease was reported at a medical convention	
1956	• First case of Minamata disease was reported to a health office	
1958	• Melee broke out between fishermen and the factory over damage to fishing operation caused by drainage of effluent from a paper mill factory to Edogawa River	
1963	• Campaign against the construction of Mishima Industrial Complex was launched	
1964	• Pollution control agreement was concluded between Yokohama City and businesses	
1965	• Outbreak of Minamata disease in the Aganogawa River downstream region was officially affirmed	
1967	• Yokkaichi Pollution Lawsuit was filed	
1969	• Lawsuit against noise of Osaka International Airport was filed	
1970	• First warning of photochemical smog was issued in Sugunami Ward, Tokyo	
1970	• Residents and businesses signed a pollution control agreement in Iwaki City, Fukushima Prefecture	
1970	• Pollution May Day rally was held (consisting of meetings and demonstrations in 16 prefectures across the nation; first united action by citizens’ groups)	
1973	• Suit demanding suspension of the construction of Buzen thermal power plant was filed	
1974	• National Liaison Council for Shinkansen Noise Pollution was inaugurated	
1975	• Citizen Campaign for Using Soap Instead of Synthetic Detergent was launched	
1976	• Kawasaki City enacted the ordinance regarding environmental impact assessment	
1977	• A 1977 OECD report—Environmental Politics in Japan—reviewed that “Japan has won many pollution abatement battles, but has not yet won the war for environmental quality.” (It was suggested that Japan needs to make aggressive efforts to improve environmental comfort (amenity), in addition to working toward pollution prevention.)	
1979	• Ordinance concerning the prevention of eutrophication of Lake Biwa in Shiga Prefecture was enacted.	Efforts directed toward resolution of domestic pollution and improvement of amenity
1981	• Ordinance concerning the prevention of eutrophication of Lake Kasumigaura in Ibaraki Prefecture was enacted	
1982	• First National Trust Symposium was held in Shari-cho Town, Hokkaido.	
1983	• Conference on Studded Tire Pollution was held in Sendai City	
1984	• Chemical substances were detected in wells in the vicinity of the final landfill site in Hinode-machi Town, Tokyo	
1987	• 20% Club for Sustainable Cities was created	
1987	• Caring for Tenjinzaki Foundation was established and certified as designated public interest corporation (natural environment conservation) by governor of Wakayama Prefecture.	
1988	• Desalination project of Lake Nakaumi-Lake Shinjiko was frozen	
1988	• National Amenity Council was inaugurated	
1988	• Ordinance concerning the Promotion of Natural Ecosystem Agriculture (organic farming) was enacted in Aya-cho Town, Miyazaki Prefecture	
1989	• Light Pollution Control Ordinance was enacted in Bisei-cho Town, Okayama Prefecture	
1990	• International Council for Local Environmental Initiatives (ICLEI) was established	
1990	• Environment Co-operative Union Shiga (Eco-Coop BIWAKO) was established	
1991	• Community study were started in Minamata City, Kumamoto Prefecture	
1992	• Coalition of Local Government for Environmental Initiative, Japan was established	
1992	• Agenda 21 was adopted at Earth Summit	
1993	• Kanagawa Prefecture drew up Japan’s first Local Agenda 21	
1993	• Groundwork Mishima was established (Mishima City, Shizuoka Prefecture)	
1993	• First Tramway Summit was held (Sapporo City, Hokkaido)	Collaborative partnerships aimed to solve global environmental problems
1995	• Organization for Minamata disease patients accepted the government’s final settlement proposal	
1995	• Kita Ward, Tokyo and Kanra-machi Town in Gunma Prefecture commenced collaboration in food recycling	
1995	• First Summit of Terraced Paddy Field was held (Yusuhara-cho Town, Kochi Prefecture)	
1996	• Community Action Network for Preserving the Akame Forest was established (Nabari City, Mie Prefecture)	
1996	• Tachikawa-machi Town, Yamagata Prefecture formulated a plan for new energy introduction (wind power generation, etc.)	
1996	• Asahi-machi Town, Yamagata Prefecture formulated Eco Museum Design and Construction Plan	
1997	• Hokkaido introduced “Time Assess”	
1999	• EcoMoney Network was established	
1999	• National Recycling Shopping Area Summit was held (Waseda, Shinjuku Ward, Tokyo)	
2000	• Tokyo Metropolitan Government launched “No Diesel Vehicle” campaign	From after-the-fact relief to prevention; From confrontation to collaboration; From environmental conservation to environmental creation; From local to global
2000	• Forest improvement agreement was concluded (Kumamoto City and Yabe-machi Town, Kumamoto Prefecture)	
2001	• Mie Prefecture enacted the Ordinance for industrial waste tax	
2002	• Tokyo’s Sugunami Ward enacted Sugunami Environmental Tax (Plastic Grocery Bag Tax) Ordinance	
2002	• Johannesburg Summit called for the implementation of Local Action 21	

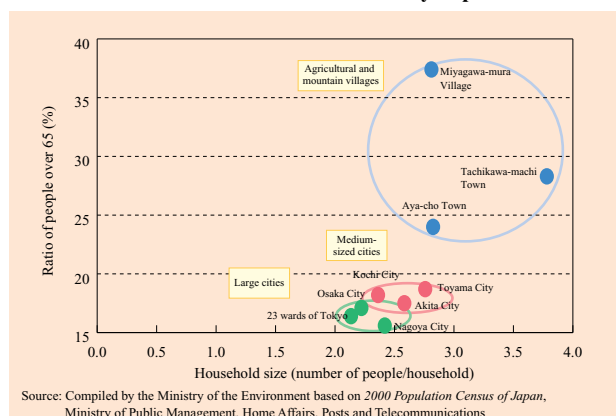
Source: Compiled by the Ministry of the Environment based on: *Environmental Information Science*, Volume 25, No. 3 (September 1996), Center for Environmental Information Science; *Environmental Sociology* by Nobuko Iijima; *Strategies for Creation of Local Governments for Environmental Initiatives*, Mitsuru Tanaka, et al (September 2002); *Global Net*, No. 130, Global Environment Forum.

## Section 2: Local Characteristics Defined by Actors and Infrastructure Comprising Local Communities

### 1. Local Characteristics and Infrastructure Comprising Local Communities

A community is comprised of nature-derived elements (e.g., climate, geography, fauna and flora, and water) and social elements (e.g. population, land use, transportation infrastructure, public facilities, tradition and culture). The relationship between these elements and the environment differs by community. For example, a tendency toward fewer members per household in urban areas results in an increase in energy and water consumption, whereas agricultural and mountain villages are more likely to have rich, multi-functional forest resources that supply timber and fix

#### Household Size and Ratio of Elderly Population



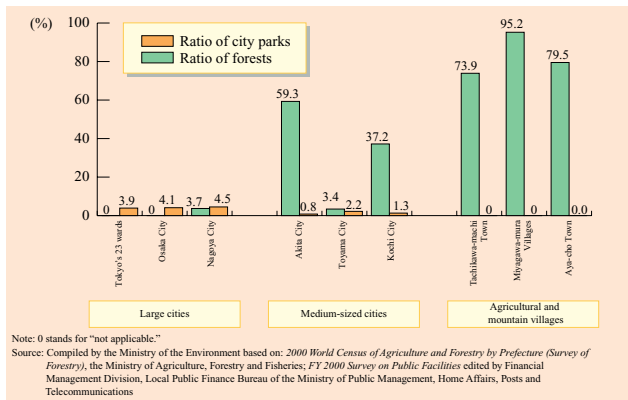
carbon dioxide. These rural communities also tend to generate a smaller amount of waste per capita per day. Differences like these results in diversification in the vision for the future that each community pursues. For instance, the concept of a “compact city” has been proposed for urban communities. This concept aims to bring one’s residence and place of work closer together by distributing urban functions at an appropriate density within a certain area. On the other hand, the concept of an “eco-village”—a community primarily emphasizing a harmonious coexistence with the environment, local

### Structure of the Community Infrastructure

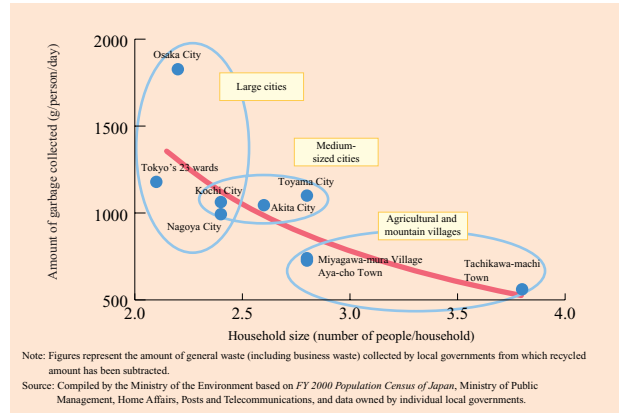
Broad classification	Medium classification	Narrow classification
Natural infrastructure	Climate	Temperature; Sunshine; Rainfall and snowfall; Wind; Tidal current
	Geography	Geographical features; Longitude and latitude; Topography; Altitude; Terrain roughness; Volcanoes; Hot springs; Geological features; Soil; Underground resources
	Fauna and flora	Natural monuments; Rare species; Regional endemic species; Primeval forests; Secondary forests; Natural grassland; Artificial forests; “Satochi-satoyama”; Agricultural land
	Atmosphere	Environmental air quality; Fragrance; Sound environment
	Water	Water quality; Groundwater; Surface water; Lakes and reservoirs; Oceans
	Natural amenity	Scenic beauty; Landscapes; Accessibility to water
	Social infrastructure	Population
City form and land use		Urban planning; Central urban district; Densely inhabited district population;
Transportation infrastructure		Green coverage rate; Agricultural land Roads; Bikeways; Sidewalks; Railroads; Tramways; Route buses; New transportation system; Ships
Domestic infrastructure		Water supply system; Waste water reuse system (rainwater, treated sewage); Sewage system; Agricultural community effluent treatment facilities; Combined household water treatment facilities; District heating and cooling
Waste disposal		Amount of waste generated; Recycling rate; Waste treatment facilities; Final landfill sites; Recovery and recycling systems
Industry and Economy		Industrial structure; Local industries; Environmental industry; Shopping areas
Building		Houses; Offices; Office buildings
Cultural facilities		Cultural halls; Community centers; Libraries; Plazas; Parks
Educational facilities		Schools; Institutions of higher education; Schools for development of occupational skills; Community colleges
Technology and Information		Technology; Skills; Intellectual property; Know-how; Wisdom
Tradition and culture		Traditional culture; Performing arts; Folktales; Festivals; Customs; Dialects
Historical background		Historical monuments; Cultural assets and buildings of historic significance; Historical events (with or without incidence of pollution); Persons of distinction and prominence

Source: Ministry of the Environment

Ratio of Forests and City Parks to Total Area (FY 2000)



Household Size and Per Capita Amount of Garbage Collected Daily (FY 2000)

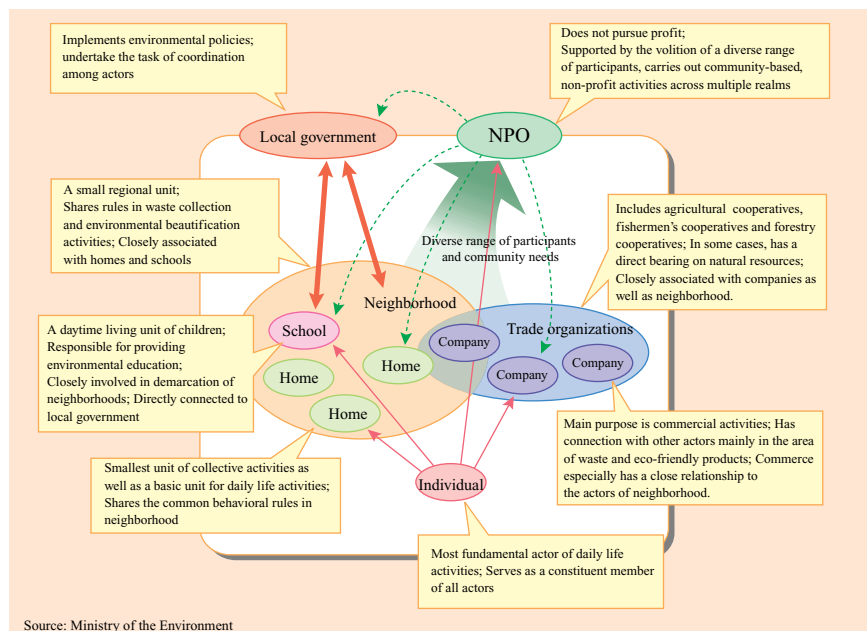


material circulation, and autonomy—has been proposed for agricultural and mountain villages so that the sustainability of these areas may be maintained.

## 2. Actors Comprising the Community and Their Roles

The community is made up of many different actors—individuals, homes, neighborhoods, schools, businesses, local governments and NPOs—that engage in social and economic activities on the footing provided by the community’s natural and social infrastructures. These actors are interrelated with the environment in a diverse fashion,

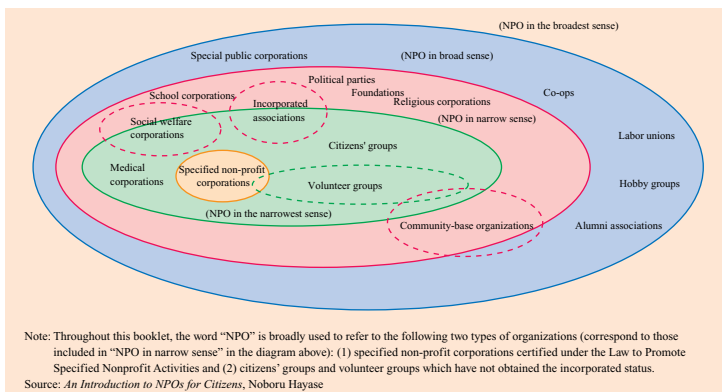
### Actors Comprising the Local Community and their Role in Environmental Conservation Activities



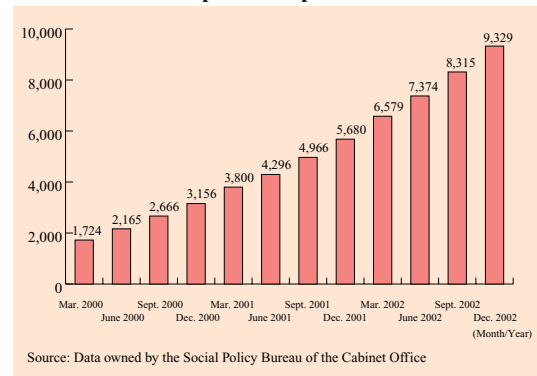
depending on their position and conditions. Some actors impose burden on the environment, while others make use of the environment. Other actors are committed to the conservation or the creation of the environment and still others want to study the environment. These actors exchange environmental information.

Today, NPOs are becoming indispensable as an actor that pursues public interest. Because of their unique characteristics of being able to implement, in a timely manner at the local level, a variety of activities that may not be entrusted to governments or the business community, NPOs are expected to play an increasingly important role in the area of the environment.

### Types of Non Profit Organization



### Increase in the Number of Specified Non-profit Corporations



## 3. Environmental Conservation Efforts Based on Local Diversity

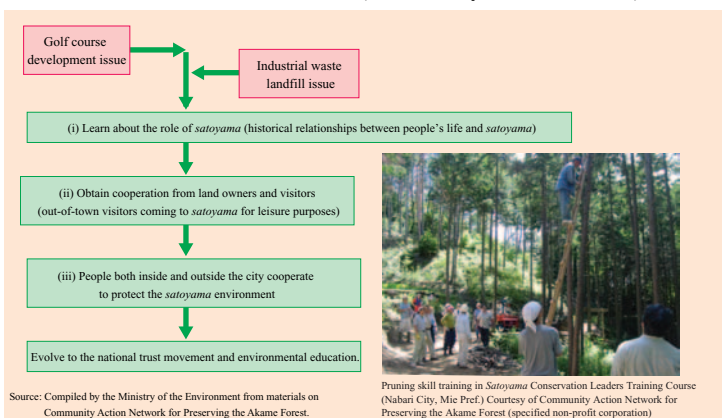
As explained above, environmental conservation efforts undertaken by individual communities entail dynamic collaborations between the natural and social infrastructures and actors unique to each community. Consequently, the direction and contents of actions undertaken to create a desired community, as well as approaches, should naturally vary from community to community. So, when various actors cooperate to make efficient use of the local characteristics distinctive to that community, it will open up new possibilities that are not possible through the effort of a single person.

## Section 3: Nurturing the Local Environmental Capacity through Acquiring an Accurate Picture of Local Resources and Partnership among Actors

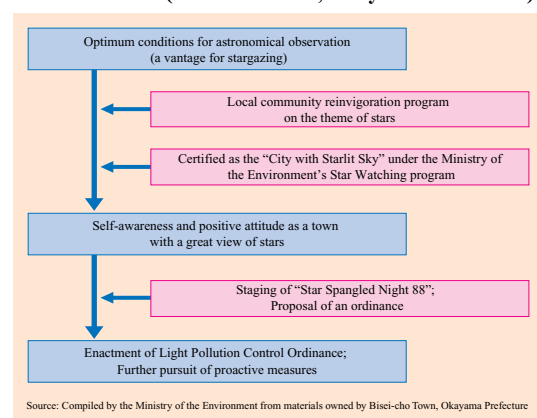
### 1. Starting Point of Local Environmental Conservation Activities

Environmental conservation activities in the community may be initiated in two ways. One is the "local problem oriented" approach that focuses on overcoming problems that have manifested themselves in the area. The second is the "local characteristics utilization" approach that identifies distinct local characteristics and makes full use of them for betterment of the community. In either approach, the ability to recognize the opportunities in one's familiar surroundings and how well one can translate such opportunities into specific actions will serve as the starting point for local efforts.

#### Eco Resort Akame-no-Mori (Nabari City, Mie Prefecture)



#### Home of Stars (Bisei-cho Town, Okayama Prefecture)





## 2. Acquiring an Accurate Knowledge of Local Resources

An accurate understanding of local resources (natural and social infrastructures and actors in the community) is a necessary prerequisite to use them effectively in environmental conservation efforts.

Minamata City in Kumamoto Prefecture directed its attention to the local community. Based on the principle of learning about local communities and renewing the relationship between nature and people as well as interpersonal relationship, the city has implemented a program called “community study.” “Community study” promotes community reinvigoration and the creation of an environmentally conscious community. Under this initiative, the city first compiled an extensive range of data and information concerning the community obtained through surveys carried out by residents of the area around the Minamata River basin. The city then utilized the data to formulate comprehensive municipal plans and basic environment plans, conclude local environmental agreements, stimulate the growth of local industries and promote ecotourism. Thus, “community study” encourages community residents to conduct surveys on their own initiative and discover the community’s climate as well as life and culture and to utilize this knowledge to change their lifestyles. Through this encouragement, the initiative helps reinvigorate and create an environmentally conscious community.

In light of the approach described above, another method to acquire accurate knowledge of the community may be taking field trips within the area in order to grasp its current situation by employing one’s five senses to the fullest extent. Enjoying activities based in reality and engaging in voluntary efforts not only allow us to develop a sense of attachment to the community but also motivate us to take action. Another approach may be interviewing local people who are well acquainted with the community.

Pooling the collected information is helpful to get an overall picture of the community. It is also important to rediscover one’s own community, e.g. by comparing with other areas or obtaining input from outside experts.

Getting accurate knowledge about local resources can lead to renewed interest in untapped resources, resources that may be used to create an environmentally conscious community. For example, Tachikawa-machi Town in Yamagata Prefecture works to revitalize the community by turning what was considered nothing more than a nuisance to the community—strong wind—to an advantage by harnessing it to generate electricity.

## 3. Collaboration among Actors

In addition to environmental problems, communities are saddled with various social and economic problems. Today, society has become more sophisticated and complex, individual actors have become more specialized, and actors dedicated to environmental issues have grown in number. In this society, it is necessary to integrate the opinions and goals of a vast array of actors so that the efforts to improve the community may be better oriented. To this end, all actors in the community must form a far-reaching partnership.

Mishima City in Shizuoka Prefecture has adopted the Groundwork method that was conceived in England. In this tripartite area-wide participation scheme, citizens play the leading role joined by local government and businesses. Under the Groundwork method, efforts are underway to restore the scenic quality of the riparian environment that was spoiled due to excessive pumping of groundwater and area development. The Groundwork involves a dedicated organization called the trust established by three cooperating actors of the area, i.e. residents, businesses, and local government. These actors work in a partnership to conserve the local environment. In England, the trust provides a work venue for women, people in their 40s and 50s, and those deeply interested in environmental issues as well as providing settings

### How to “Feel” the Community

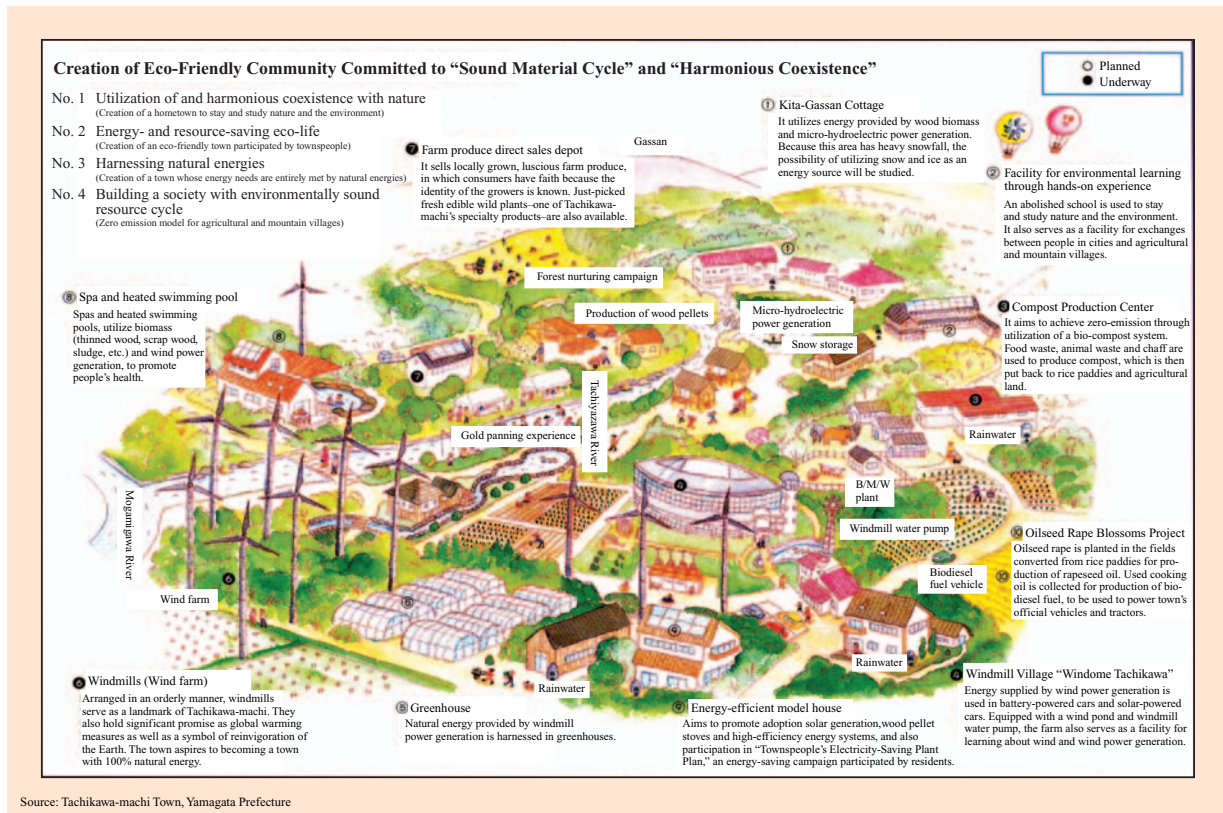


### Specific Ways for Getting to Know the Community

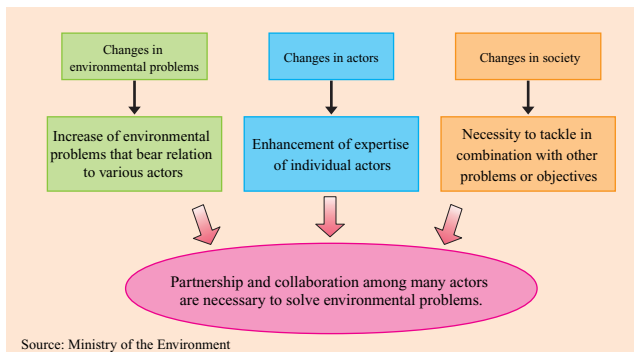
	Specific ways
(i) See and feel the community on one's own	Town watching; Nature game; Regional observation program; Orienteering; Stamp rally; Nature trail hiking; Town expedition; Clean-up campaign
(ii) Study about the community on one's own or learn from others	Community study; Study of local history; Community reinvigoration event
(iii) Learn about the community by making something jointly with others	Map making; Creation of community reinvigoration picture book
(iv) Know about one's community by learning about other communities	Research on activities of other communities; Study tours to other areas; Inviting people from other communities for a lecture and comments

Source: Ministry of the Environment

## Eco Green Town Tachikawa Project



### Necessity of Partnerships among Actors



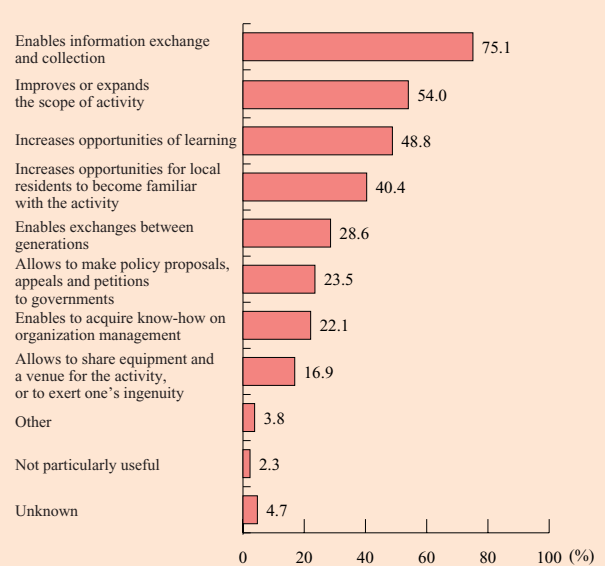
where people can find purpose of life, feel a sense of fulfillment, and make a contribution to society. In the case of the environmental conservation effort of Mishima City, the local government, residents and children each fulfill their role. The effort is financially supported by funds contributed by participating citizens’ groups, corporations and local government. There is also support in the form of donation of goods. Collaboration like this engenders relationships built on mutual trust and results in noticeable reinvigoration of the community.

As seen in the above case, partnerships among actors can be expected to produce synergistic effect that will yield greater positive results than if actors worked independently. Also, collaboration among actors has the advantages of increasing public recognition and social credibility of their activities and making them financially stable. Inter-actors collaboration is expected to provide an opportunity for obtaining support from community residents.

### 4. Information Dissemination and Sharing

Information about the state of the environment, community-implemented programs, and human resources is crucial

### Merits (Advantages) of Partnership among Actors



Note: Multiple answers about how useful exchanges, cooperation and partnerships with other organizations are. Respondents consisted of 213 citizens’ groups registered in Setagaya Ward, Tokyo.

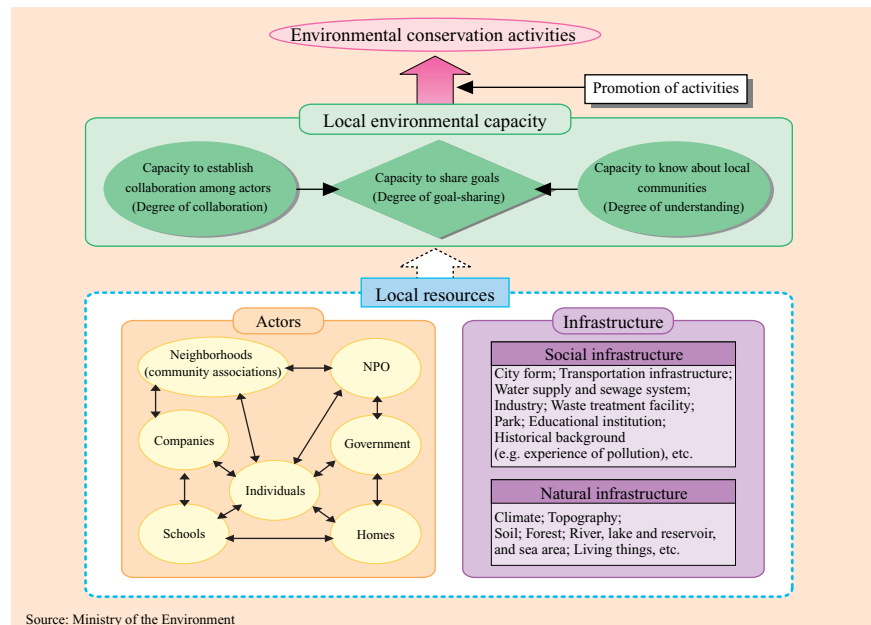
Source: White Paper on the National Lifestyle FY 2000, Cabinet Office

to get an accurate picture of the local community and make effective partnerships among actors. Such environment-related information is also a prerequisite for motivating the actors to engage in environmental conservation. It is important that those who possess environmental information and those who implement environmental measures disseminate and offer the information for sharing. Doing this raises the degree of specialization of the efforts and expands the range of possibilities for utilization of local resources.

### 5. Efforts to Nurture “Local Environmental Capacity”

As described above, acquiring an accurate picture of local resources and forming an inter-actor partnership enables the entire community to share a common vision and thereby increase the so-called “local environmental capacity”—a commitment to improving the environment and community and the capacity to achieve the established goal. So, local environmental capacity allows us to obtain a picture of the community from all perspectives, including environmental, social and economic, and this will ultimately lead to the effective implementation of area-wide efforts toward a truly sustainable community.

**Environmental Conservation Activities Utilizing Local Environmental Capacity**



Source: Ministry of the Environment

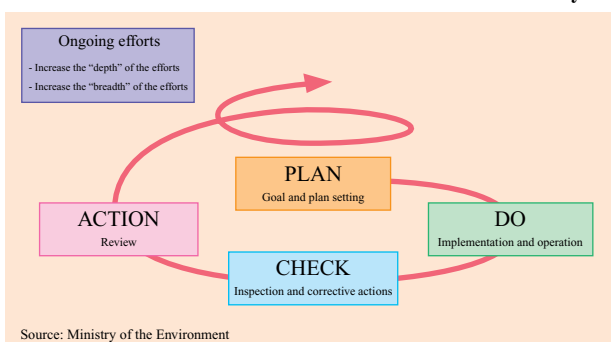
## Section 4: Scope and Effectiveness of the Effort that Utilizes the Local Environmental Capacity

### 1. Continuation of Environmental Conservation Activities

To make environmental efforts long-sustained, it is important, by creating a system to efficiently and effectively carry out the activities, to monitor the area continuously, set appropriate goals, and maintain the local environmental capacity (the commitment and ability to achieve the goals).

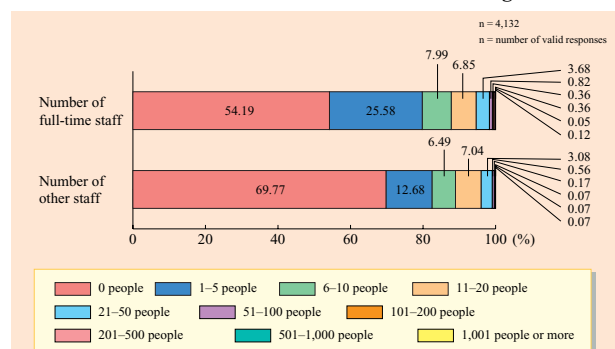
Recruiting leaders and participants is also important. Specifically, it is important to encourage people to coordinate the respective roles of actors while enhancing the awareness of participating actors through the activities they are involved. In addition to these leaders, a broad range of people is needed to support these efforts, people who work in the front line, members whose membership dues support the activity, and people who have the expertise to give advice or guidance. Recruiting such a diverse range of people creates a setting where participants can concentrate on bringing

**Environmental Conservation Activities Based on PDCA Cycle**



Source: Ministry of the Environment

**Number of Staff in Environmental Conservation Organizations**



Note: “Other staff” refers to part-time, temporary or unpaid staff constantly involved in planning and running of the organization

Source: Compiled by the Ministry of the Environment based on FY 2001 Environmental NGOs Compendium, Japan Environment Corporation



their abilities to full play, which in turn enables the community efforts to be carried out in a responsible manner and with a sense of pride.

To ensure the continuance of local actions, funds and operation bases are required as a mechanism for linking local environmental capacity with local efforts. According to a poll of citizens' groups, 46% of the groups advocating environmental conservation have fiscal size of 1 million yen or less, and many of them have difficulty in expanding or maintaining their activities owing to a shortage of funds. When asked what areas they wish to receive support from governments, 49.7% of respondents cited "information exchange and securing and/or upgrading a place to serve as a base for activities." Thus, challenge that lies ahead is finding ways to increase funding and upgrade operation bases for local actions.

## 2. Community Reinvigoration Effort through Local Environmental Capacity and its Effects

Today, there is public recognition of the importance of environmentally sound community development. The Law for the Promotion of Nature Restoration enacted in December 2002 provides a framework for nature restoration projects implemented through the participation of various local actors. The projects already underway in Kushiro-shitsugen wetlands and in Kunugiyama district of Saitama Prefecture can be considered as the efforts that aim to balance or consolidate the area's economic development with environmental conservation.

Because local programs based on local environmental capacity require a grasp of the community's distinctive characteristics and area-wide unified efforts, they not only protect the local environment but also bring about economic benefits and revitalization of the area, ultimately contributing to the creation of a society where development and environmental conservation are simultaneously achieved.

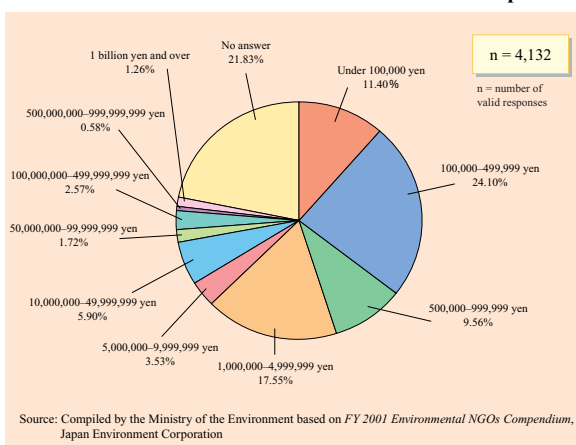
For example, the concept of "sustainable tourism"—as opposed to resort development-oriented tourism—has captured public attention. What characterizes this approach is the simultaneous attainment of environmental conservation, maintenance of local communities, and long-term economic benefits through the use of the area's natural, cultural and historical heritages, and, sometimes, through the infusion of innovative ideas. Yufuin-cho Town in Oita Prefecture may be said to embody this concept. The town successfully preserves its abundant natural environment while at the same time welcoming more than three million tourists annually.

There is also a move to foster community-led efforts to develop the social economy by promoting environmentally friendly community businesses. The *Nanohana* Project (Oilseed Rape Blossoms Project) in the Lake Biwa area of Shiga Prefecture represents a community business program that encompasses the cultivation of oilseed

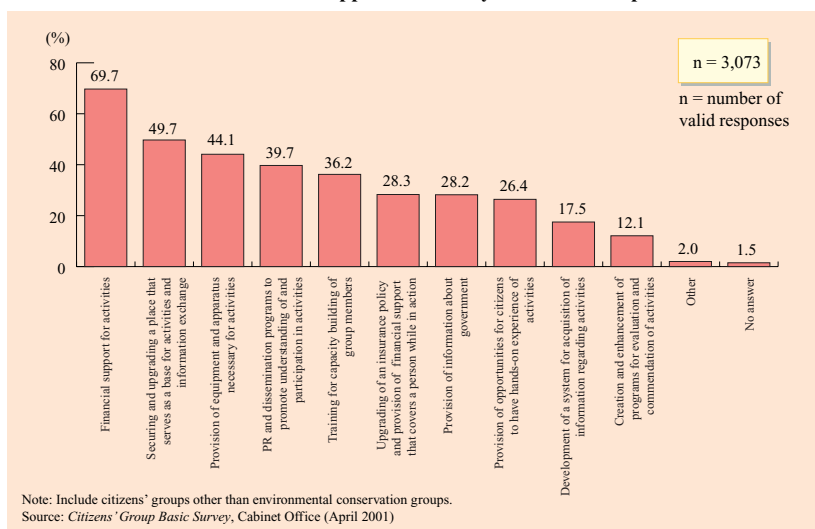
### Skills Needed to Make Full Use of Local Environmental Capacity



### Fiscal Size of Environmental Conservation Groups



### Government's Support Needed by Citizens' Groups



rape, extraction and utilization of rapeseed oil, and utilization of waste oil and oil cake. The project enables balancing environmental conservation and resource recycling activities with commercial activities.

Thus, not only can the efforts based on local environmental capacity provide local residents with a purpose, an opportunity for self-fulfillment and spiritual richness, but they can also promote intra-community exchanges thereby fostering a sense of community and producing synergistic effect to encourage people to participate in community-building initiatives. When the positive aspects of the local community are communicated both inside and outside of the area, interaction with people outside will be stimulated and will lead to an increase in residents, companies, and business establishments in the community.

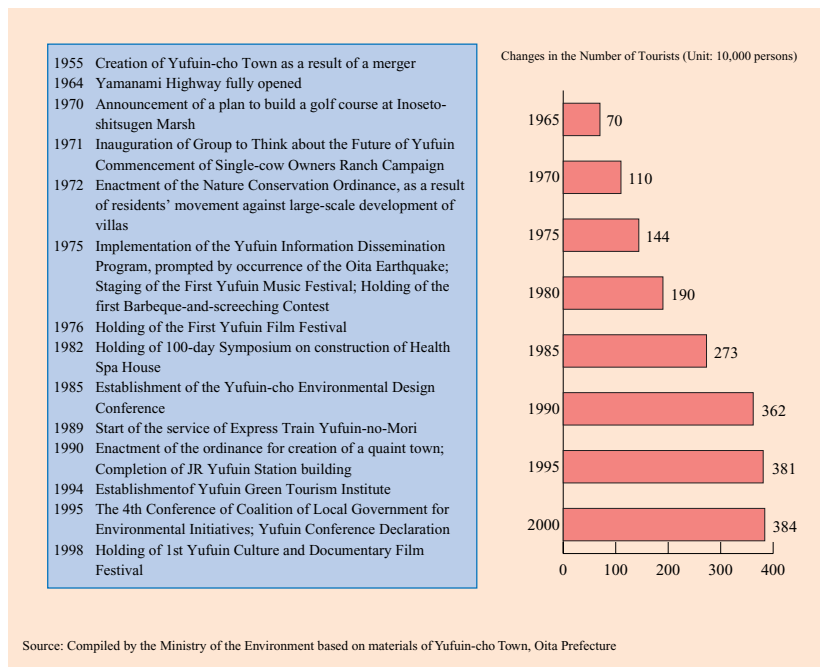
### 3. Enhancing the Local Environmental Capacity through Partnerships with Other Communities

Initiatives based on the local environmental capacity may sometimes be undertaken beyond the boundaries of the areas.

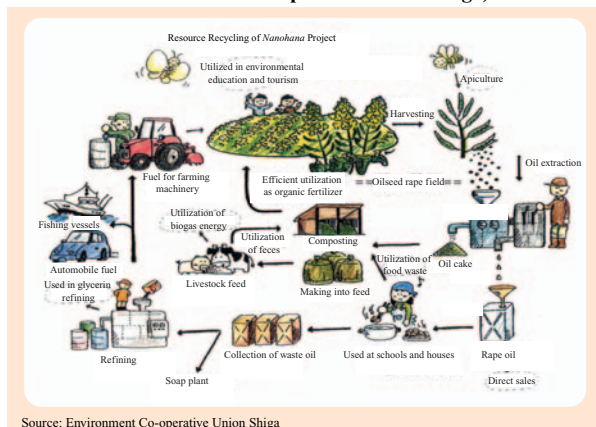
For instance, when effective use of local resources is not easily carried out by a single community, implementing a joint program with other communities might produce the desired results. Tokyo's Kita Ward and Kanra-machi Town in Gunma Prefecture joined forces to solve problems that each has experienced in the past through a complementary partnership. School lunch leftovers at elementary and junior-high schools in Kita Ward are composted for use for organic farming in Kanra-machi Town, and harvested crops are used to prepare school lunch in Kita Ward. This program has also helped reduce the amount of leftovers at elementary and junior-high schools in Kita Ward.

In a case where a problem cannot be addressed effectively without involving the entire region where socio-economic activities and the workings of nature take place, it is imperative to increase local environmental capacity through region-wide partnerships. Yabe-machi Town (Kumamoto Prefecture), located on the upper reaches of Yabegawa River, and Kumamoto City, situated on the lower reaches of the river, directed their attention to the forest's water recharging function and, to take advantage of this function in groundwater conservation, have concluded a forest improvement agreement. There is every indication that residents' participation of the two cities in forest

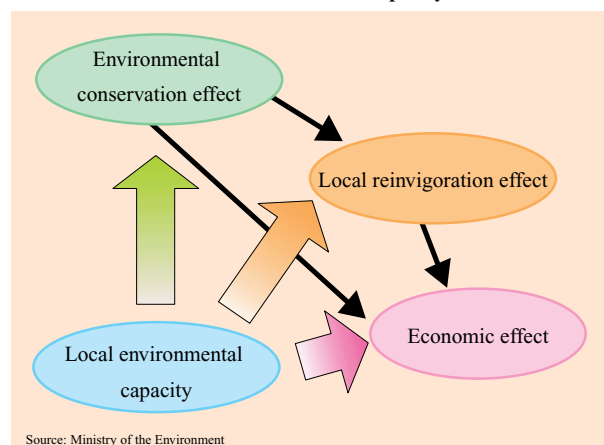
#### Sustainable Tourism of Yufuin-cho Town, Oita Prefecture



#### Nanohana Project (Oilseed Rape Blossoms Project of Environment Co-operative Union Shiga)



#### Effects of Local Environmental Capacity Utilization



management activities offers excellent opportunities for exchanges between the two communities and learning about the relationship between the sea and mountain.

There is also an instance where communities saddled with the same problems can collaborate in information exchange and joint research to broaden the scope of their initiatives.

Still another example is the community effort that embraces a broader perspective of improving not just the local but also the global environment and provides developing nations with environmental cooperation, chiefly in the realm of the pollution control measures, drawing on the area's pollution experience.

The City of Kitakyushu has systematically organized its local resources (i.e., past experience in overcoming pollution, successes in international cooperation, and pollution prevention technologies) and developed an extensive range of human resource use programs and training materials. The city currently offers support programs to cities including Dalian, China, that consist primarily of joint projects and human resources development

#### 4. Propagation of Local Initiatives to Outside the Community

Initiatives based on local environmental capacity that have proven effective within the area can become significant to society in general by reinvigorating various areas as they propagate to other communities both inside and outside Japan.

For example, civic movements, such as the promotion of laundry soap in the Lake Biwa area, coupled with local government's energetic efforts to conserve the environment of the lake culminated in the International Conference on the Conservation and Management of Lakes held in response to the appeal of Shiga Prefecture. The conference established a precedent where the initiative of a local government produced a setting conducive to international exchange and the propagation of the theme of conservation of the environment of lakes and marshes.

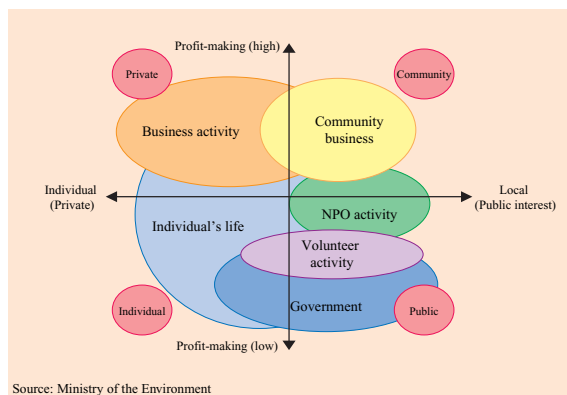
#### 5. Working toward the Creation of a Sustainable Society through Local Environmental Capacity

As we have seen so far, local environmental capacity aids in the creation of a sustainable local community on two fronts: environmental conservation and community reinvigoration. Promoting programs based on local environmental capacity is not easy, but each of the initiatives has the potential to spread as an effective model for balancing the development of the local community with environmental conservation. They also can serve as significant forces for change toward a sustainable society. Today, it has become vital for individual communities to nurture and increase their local environmental capacity.

### Conclusion

Given the fact that environmental constraints have begun to loom over our daily life, it is essential that each of us take swift action to tackle this tough issue, bearing in mind that each of us is cast in a leading role in environmental efforts. As "Making It Happen!" was the theme of the Johannesburg Summit, taking actions on our own initiative and from our own backyard, i.e., in our daily life and in our local communities, can become a positive step forward that will carry us closer to a change leading to a sustainable society.

#### Positioning of Community Businesses



#### Food Exchange Program (Kita Ward, Tokyo, and Kanra-machi Town, Gunma Prefecture)

