The Satoyama Movement and Its Adaptability: Beyond Ideology and Institutionalization

5

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Abstract

This chapter discusses the Satoyama conservation movement, a movement aiming to conserve secondary nature, such as coppices that had sustained the lives and livelihoods of people up to the period of rapid economic growth from the 1960s to the early 1970s. The movement emerged from the broader nature conservation movement in Japan and rapidly spread through the country as Japan entered an era that came to value biodiversity, tracing the movement's history, as set out below, with reference to case studies mainly around the Tokyo metropolitan area.

The importance of local "*satoyama*" in conserving biodiversity was recognized in the 1980s, and activity by citizen volunteers aiming for *satoyama* regeneration spread like fire in the 1990s. The conservation of *satoyama* has been a national goal since the 2000s, with national and local governments providing support to the movement. However, the outcomes, in terms of conserving biodiversity, have been poor, even as areas subject to eco-governmentality have expanded, making it more difficult to manifest suggestions from citizens to create new common areas in service to *satoyama* and biodiversity. In the 2010s, especially since 3.11 (the Tōhoku earthquake, tsunami, and the Fukushima nuclear disaster of March 2011), there has been a noticeable movement to use *satoyama* resources to establish "*shigoto* (work)" and livelihoods, distinct from the nature conservation movement that had developed up to that point. Their aim has a similar orientation to that of the grassroots Satoyama conservation movement of the 1980s and 1990s, even as the direction taken by this latent network holds the key to a sustainable society.

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5.1 Introduction

This chapter discusses the Satoyama conservation movement (the Satoyama movement), which emerged from the nature conservation movement in Japan and spread rapidly throughout the country from the1990s.[1] The reason for the focus on this movement is that biodiversity came to be emphasized in this era, and the Satoyama movement incorporated something new and different from conventional nature conservation movements in terms of both what it aimed to protect, and the means it would use for doing so. Another reason is that, in contrast to conventional nature conservation movements in Japan, which had been strongly influenced by European and American thought on nature conservation, there are aspects in which the Satoyama movement, while being influenced by such sources, appears to have spread after arising independently from Japan's historical and social contexts. Section 5.2 explains the characteristics of this movement, providing supplementary information on areas such as Japan's modern history and environmental awareness at the local level.

Section 5.3 looks at two case studies from within Yokohama City, where the Satoyama movement is thriving. From the example of Maioka Park, considered by many as one of the hearths of the movement, we confirm that this involved the creation of a community of citizens participating to collaboratively manage *satoyama*, and an effort to create new common areas for themselves. Then, with the example of *satoyama* governance in the Niiharu District, we can trace the particulars of the challenges placed on key persons in the collaborative relationship between citizen and government actors brought about by the success of the movement, with additional analysis on the causes using the concept of eco-governmentality. In turn, Sect. 5.4 examines the development of the Satoyama movement since the 2000s, when *satoyama* conservation became a national objective, and mobilization of volunteers was promoted by local governments in what approaches eco-nationalism. Statistically, the number of organizations involved in this movement increased, but the effects on biodiversity conservation were meager,

[1] From 1999 until the present, the author has been conducting fieldwork based around participant observation and interviews, while also engaging as a practitioner in the Satoyama movement in and around the Tokyo metropolitan area. Since 2003, he has worked for the NPO Yokohama Satoyama Institute, becoming a representative in 2005; Sects. 5.3 and 5.5 below use data obtained through this NPO's independent projects, as well as projects undertaken under consignment from Yokohama City or the like (Matsumura 2018). For the two case studies in Sect. 5.3, in addition to intermittent interviews with Mr. J and Ms. Y, reference has been made to Murahashi (1994), Jumonji (1999), Asaba (2003), Tanami (2003), and Sawada (2009).

and participants are steadily aging as volunteer numbers have stalled. Furthermore, this section points out the problem of how, as Satoyama conservation efforts were encouraged under government leadership from the national level to the municipal level, the significance of this movement as an effort by people themselves to reclaim a relationship between nature and society was neglected, making it difficult to harness the creativity of citizens.

Section 5.5 introduces efforts in the 2010s, such as *satoyama*-oriented social entrepreneurs and new farmers that have emerged independently from developments in nature conservation movements up to that point, especially since 3.11. Their efforts to autonomously create "*shigoto* (work)" and livelihoods from the unused space and biomass resources of the *satoyama* that remain around urban areas may be individual and sporadic, but have nonetheless developed into a quiet movement. Their aim has a similar orientation to that of the grassroots Satoyama movement of the 1980s to 1990s, and it is anticipated that the direction taken by this movement's latent but growing network holds much promise for making key contributions toward a sustainable society.

5.2 What Is the Satoyama Movement?

5.2.1 Rapid Economic Growth and the Fossil Fuel Revolution

In 1945, Japan suffered defeat in the Second World War, but recovered rapidly with political and economic support from the USA and others, achieving annual economic growth of more than 10% from the mid-1950s to the early 1970s. Japan's GNP surpassed that of the UK, France, and West Germany (as it was at the time) in each year from 1966 to 1968, with Japan boasting of economic power second only to the USA. Japan's industrial structure also changed significantly. In 1950, almost half of Japanese people were engaged in primary industry, but in 1970 this had decreased sharply to fewer than one in five people; meanwhile, the proportion of people employed as office workers rose to almost two thirds. The standard of living for Japanese citizens also rose, with ownership of the "Three Sacred Treasures"[2] (televisions, refrigerators, and washing machines) proliferating from the mid-1950s, and of the "3Cs" (color televisions, air conditioners, and cars) from the mid-1960s.

In the latter half of the 1960s, the degradation of nature and pollution (including air and water pollution) became social issues in Japan, problems brought about by the rapid economic growth. An extraordinary session of the Diet, the national legislature, held in November 1970, referred to as the "Pollution Diet" because it deliberated on bills relating to the control of pollution, established the Environmental

[2]The "Three Sacred Treasures" (the Mirror, Sword, and Jewel) have been inherited by successive generations of emperors as the symbols of Japan's imperial throne. In turn, the term is used here to refer to three representative everyday necessities.

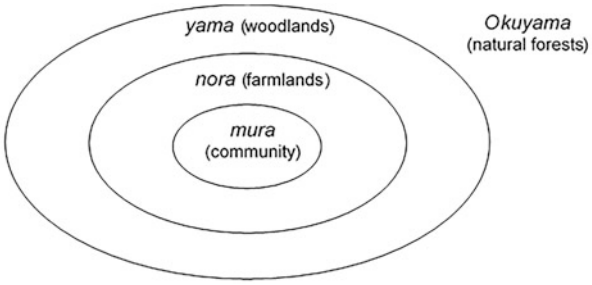

Fig. 5.1 Villagers' perception of the *satoyama* landscape

Agency in July 1971. Global interest in environmental issues was growing: In 1972, the Club of Rome published "The Limits to Growth" report, and the United Nations Conference on the Human Environment was held in Stockholm in 1972. Influenced by this global environmental movement, movements aiming to combat pollution and conserve nature also spread in Japan.

Because the nature conservation movement in the 1970s tended to understand the relationship between humans and nature as antagonistic, it generally had the objective of preserving wilderness with a high degree of vegetation naturalness—allowing natural transition and excluding human influence were taken to be desirable. Accordingly, in the case of movements aiming to protect forests, there was a common practice of people using their own bodies to bring development to a halt, aiming to stop the felling of even a single tree. Although people in Japanese society at that time understood the need to protect untouched nature, the familiar *satoyama*—forms of nature that people had come to manage on a daily basis—were not recognized as an object that should be protected.

At this point, let us look at the meaning of the Japanese term *satoyama*, of the utmost importance in this chapter, with reference to illustrations.

Figure 5.1 is a schematic representation of the structure of traditional rural landscapes in Japan from the perspective of villagers. At the center of the rural village environment is the *mura* (village community) in which people live, around which are *nora* (farmlands), and then *yama* (woodlands). This concentric arrangement of *mura-nora-yama* comprises the nature relations recognized by people in the community as their territory, a human–nature space. Strictly speaking, *satoyama* refers only to the *yama* area, but in a broader sense *satoyama* refers to the entire rural village environment that has come to be regularly managed by people.

Today, the term *satoyama* is generally used in the wider sense, so in this paper the *satoyama* region is defined as the rural landscape that has come to be managed by the local villagers—in other words, the territory in the diagram including the entirety of the *mura-nora-yama* areas. It is significant that, from an ecological perspective, the scope of the term encompasses forms of so-called secondary nature, which are subject to human intervention. Natural forests, referred to as *okuyama,* usually continue from outside of the *satoyama*. People from the community rarely enter into the *okuyama*, a space exclusively for wildlife that has become territory of the

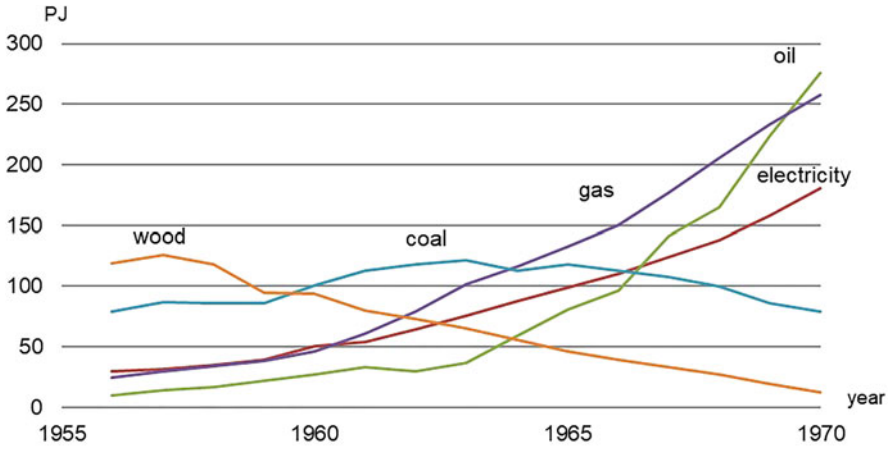

Fig. 5.2 Changes in household fuel consumption (This figure was created with reference to the Ministry of Internal Affairs and Communications' "*Nihon no chōki tōkei keiretsu* [Historical Statistics of Japan]" (accessed January 13, 2020: http://warp.da.ndl.go.jp/info:ndljp/pid/11119581/www.stat.go.jp/data/chouki). The source of this data is the Japan Gas Association's "*Gas jigyō binran* [Gas Business Handbook].")

kami (spirits that can be elements of the landscape or forces of nature and can influence the course of natural forces and human events) rather than of humans.

The form of vegetation that characterizes the *yama* in *satoyama* is the coppice. Before Japan's rapid economic growth, coppices were managed as sources of fuel (wood and charcoal) and for agricultural use and had supported people's lives and livelihoods.

Figure 5.2 shows changes in household fuel consumption. As can be seen from the graph, wood and charcoal were the main sources of household fuel in 1955, and coal was the most used fossil fuel. However, a "fossil fuel revolution" took place during the period of rapid economic growth and from the 1960s electricity, gas, and oil spread rapidly, so that at the start of the 1970s wood was hardly used, and coppices lost their value as a supply of fuel. Fertilizers, essential for growing crops, had been made from fermented fallen leaves but were replaced by chemical fertilizers as well, meaning that coppices also lost their value as agricultural forests. Thus, from Japan's period of rapid economic growth, many *satoyama* ceased to be managed, and development of residences and factories progressed in city suburbs.

5.2.2 The *satoyama* Renaissance and Expansion of the Satoyama Movement

The Nature Conservation Society of Osaka, established in 1976, is thought to be the first organization within the nature conservation movement to have deliberately used the term *satoyama*. This group surveyed the state of wildlife inhabiting the Osaka

Prefecture and found that many species inhabited low-lying areas close to human settlements, known as *satoyama* in 1983. Following this "discovery of *satoyama,*" the term has been actively used in the strategy of citizens' wildlife protection movements (Okada 2017).[3]

Since the latter half of the 1980s, academic research has sought to reevaluate *satoyama*, especially in response to nature conservation movements focusing on *satoyama* around urban areas. An ecological paradigm shift lay behind this, coming to emphasize biodiversity when evaluating nature (Reid and Miller 1989; Takeuchi 1991; Wilson 1992; Takacs 1996; Washitani and Yahara 1996). Abundant research emerged asserting the importance of *satoyama* for preserving biodiversity, including claims that as many species exist in the secondary nature observed in *satoyama* as in untouched nature and that *satoyama* were spaces preserving species that have endured since the last ice age (Moriyama 1988; Ishii et al. 1993; Tabata 1997).

It had taken regular long-term effort to maintain the *satoyama* landscapes, and people would need to continually manage them if they were to continue to be abundant and healthy. However, since the fossil fuel revolution, *satoyama* entered into a state of low use, insufficient to assure the health of these *satoyama* ecosystems, as efforts from human beings became more infrequent or stopped. A question therefore arose concerning who would take on *satoyama* restoration and management and, in particular, who would go on to do the appropriate maintenance and management work for those *satoyama* that had already been abandoned and where ecological succession was progressing.

When it comes to this issue, a movement had already emerged from the mid-1980s in large cities, such as Osaka and Yokohama, of citizens with no relevant landownership rights voluntarily going to *satoyama* landscapes in order to undertake conservation work, including mowing and thinning back trees. These were voluntary movements with the intention of independently managing those *satoyama* locations that had become unsightly due to ecological succession that had occurred in the absence of management. They were to be managed as new commons, from the motivation of preserving the landscape as it had been. At that time, the significance of their activities was supported from a conservation ecology perspective, so efforts aiming for *satoyama* regeneration received strong support.

Back then, participants in the movement often referred to the practices of the British Trust for Conservation Volunteers (an environmental NGO now called The Conservation Volunteers) when it came to practical techniques (Shigematsu 1991). People in Japan became aware of how the British Trust for Conservation Volunteers involved large numbers of volunteers and maintained and managed natural sites and cultural assets scattered throughout the country. This led to an increased enthusiasm

[3] For example, a symposium was held in Osaka City in 1986 for the first time with the theme of satoyama conservation, the Satoyama Trust was established in Kanazawa City in 1990 to protect the secondary nature from development by citizens, the Satoyama Study Group was formed in Kyoto City in 1992 under the leadership of ecologists, and the Satoyama Summit was held in Tsuchiura City, close to Tokyo, in 1993 to promote the protection of rare migratory birds that come to the satoyama in summer.

that citizens in Japan could also play an active role by taking on responsibility for *satoyama* regeneration and maintenance.

In the 1990s, the Satoyama movement expanded rapidly from city suburbs to the whole country. The *Zenkoku-Zoukibayashi-Kaigi* (Congress for the Coppices of Japan) and the *Shinrin to Shimin o Musubu Zenkoku no Tsudoi* (National Gatherings to Connect Forests and Citizens) began from 1992 and 1996, respectively, allowing citizens involved in Satoyama conservation from around the country to gather and share their knowledge and experience. Furthermore, the previously overlooked visual beauty of *satoyama* landscapes and the richness of the lives of those living within them were conveyed through public broadcasts and collections of photographs from the mid-1990s, stirring feelings of nostalgia in people and leading to what could be described as a *satoyama* boom throughout the country, which spurred expansion of the Satoyama movement. However, the Satoyama movement developed into a large movement not under the guidance of a core national organization, but as a result of volunteers personally deciding to work hard and participate in conservation activities in order to protect *satoyama* in their local areas.

Beginning in the early 2000s, conservation of *satoyama* became part of the environmental policy of the state and local governments. A report from the Ministry of the Environment in 2001 showed evidence that 60% of endangered species were concentrated in *satoyama*, which is a greater distribution than in untouched nature (Ministry of the Environment 2001). The Second National Biodiversity Strategy, formulated in 2002, stated explicitly that insufficient care for *satoyama* threatened biodiversity in Japan (Ministry of the Environment 2002). Additionally, the "Satoyama Initiative" was proposed in 2007, disseminating Japanese *satoyama* to the world, as the tenth Conference of the Parties (COP10) to the Convention on Biological Diversity (CBD) was about to be held in Nagoya City in 2010. It aimed to realize a sustainable society together with people around the world by referring satoyama, where people live in harmony with nature.[4]

Today, it is said that there are four risks that biodiversity faces in Japan. The first is the threat of extinction of organisms caused by the strong influence of human activity, strongly linked to problems of overuse such as overdevelopment and overexploitation. The second risk is the problem of underuse—that is to say, the danger caused by reductions in work where people had been working in close use relations with nature. The third risk concerns issues caused by foreign species or chemicals not found in nature but which humans have brought into *satoyama* landscapes. The fourth risk is the global threat brought about by global warming (Ministry of the Environment 2012). Of these, the second risk could also be described as a crisis for *satoyama*, and presently, the whole country is promoting the Satoyama movement in order to conserve biodiversity in Japan.

Figures 5.3 and 5.4 show examples of the Satoyama movement around urban areas. These are photographs of an NPO that recruited ordinary citizens and, with the

[4]Please see The International Partnership for the Satoyama Initiative (accessed January 13, 2020: https://satoyama-initiative.org/).

Fig. 5.3 Citizen participation in weeding and brushing in an planted forest

permission of the local government, carried out conservation activities on poorly maintained public land. Figure 5.3 shows weeding and brushing in a planted forest, and Fig. 5.4 shows citizen participants mowing the banks of rice paddies. As these examples show, citizens and government have been working together more and more to preserve *satoyama* in recent years.

5.3 The Satoyama Movement within Yokohama City

5.3.1 The State of *satoyama* Within the City and Conservation Systems

The revitalization of *satoyama* and the rise of the Satoyama movement, which began in the environs of urban areas in the mid-1980s, had spread throughout Japan by the early 1990s, and conservation of *satoyama* soon came to be promoted as

Fig. 5.4 Citizen participation in mowing the banks of rice paddies

environmental policy by national and local governments by the early 2000s. Looking at efforts aimed at conserving *satoyama* at the national level, the grassroots citizens' movements from the bottom and environmental policies from the top seem to have a similar orientation, but if one observes activity at the local level one can understand that a gap has arisen between the two. In order to look at this gap, let us focus on the movement and policy in Yokohama City, which emerged as a leader of the Satoyama movement, tracing developments in that area in order to establish the situation and issues as it spread.

With an area of 435 km^2 and population of 3.75 million people (as of January 2020), Yokohama City is the second largest city in Japan after Tokyo in terms of inhabitants. Because it is within commuting distance to Tokyo, the city grew rapidly (by approximately 100,000 people each year) during the period or rapid economic growth from 1960 through the early 1970s, as the capital expanded. As can be observed from Fig. 5.5, during this period the residential land area more than doubled, from approximately 60 km^2 to approximately 140 km^2, matched by a loss of approximately a third of the area of farmlands and woodlands (now called *satoyama*), from approximately 230 km^2 to approximately 150 km^2.

From the mid-1960s to mid-1970s, against a background of intensifying urban problems associated with rapid economic growth, progressive leaders emerged throughout the country who hearing the concerns of local residents called for the promotion of welfare and environmental policies. In the midst of such circumstances, from 1963 to 1978, Ichio Asukata, a politician form the Socialist Party, served as mayor of a progressive local government in Yokohama and

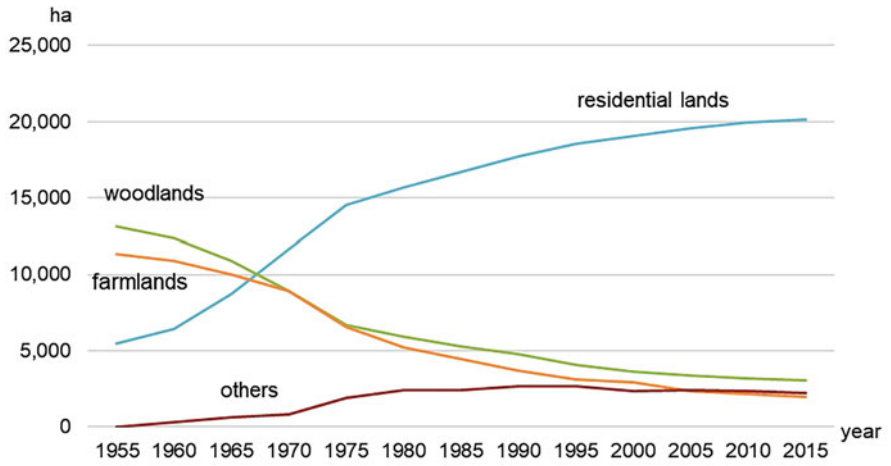

Fig. 5.5 Changes to area by use in Yokohama City (This figure is created on the basis of the "*Yokohama-shi Tōkeisho* [Yokohama City Statistical Report]". The "woodland" category comprises the total area of *san'rin* (mountain woodland) and *gen'ya* (fields), and the "farmland" category comprises the total area of *ta* (rice fields) and *hatake* (other cultivated fields). These data do not include land exempt from fixed property tax, such as public land owned by national and local governments, public roads, conservation forests, school land, and the precincts of religious corporations. Parking lots and storage facilities make up much of the "others" category.)

commenced with efforts aiming toward environmental conservation faster than in other local governments, in response to reduced *satoyama* following rapid population increases and urbanization of lands. For example, when the new City Planning Act came into force in 1970, approximately one quarter of the area of the city was designated as "urbanization control areas," in which development activities were significantly restricted. Before anywhere else in the country, a government bureau was established for green space conservation efforts in 1971, and a *satoyama* conservation system unique to the city was launched, as represented by "*Shimin no Mori* (Citizens' Forests)."

It was generally recommended that land be purchased as public land so as not to be developed, in order to reliably secure green space. However, buying large areas of land in urban areas, where land is expensive, is difficult. Therefore, the "Citizens' Forests" system was devised as a way to protect forestland in which there were strong pressures to develop. Under this system, Yokohama City entered into lease contracts with landowners, which aimed to preserve land provided as "Citizens' Forests" and to open the land to the public, having provided the minimum level of sidewalks and rest facilities required. Meanwhile, landowners for whom development activities became prohibited received preferential treatment in terms of exemption from property taxes and city planning taxes. Additionally, instead of seeking light work for tasks such as patrols within the forests, cleaning, mowing, and repair of facilities, this system involved Yokohama City subsidizing the "*Shimin no Mori*

Aigokai (Citizens' Forests Protection Associations)," which was formed through landowners.

5.3.2 *Satoyama* Conservation Initiatives with Citizen Participation—The Example of Maioka Park

In Yokohama City, the political opportunity to promote *satoyama lands* opened up during the years 1963–1978 in which a reformer politician served as mayor and established a culture of considering public policy and public works with citizen participation; since then, advanced initiatives have been established across the country. Of these, I would like here to introduce the example of Maioka Park, which can be said to have been a source of significant influence on the Satoyama movement thereafter.

Maioka Park is a regional park with an area of approximately 30 hectares, making use of the *satoyama* land type. Characteristic of this park are the facts that valuable *satoyama* landscape has been preserved in the environs of the city so that citizens can enjoy farming in the park and that the park has become a space in which people from many walks of life are active, and citizens were deeply involved in the creation of the park, from planning to administration.

The distinctive creation of this park started when the "*Maioka Mizu to Midori no Kai* (Maioka Water and Greenery Association)," a citizens' group established in 1983, stated its objection to Yokohama's original plan to reclaim wetland that had been paddy fields in order to convert it to grass squares, which would surely have meant destroying rich ecosystems in order to create the sort of typical city parks one can see anywhere. Mr. J (a young man, born in 1960), who found this group, thought that there was an obligation to take care of the coppices and fields that had been in this area and wanted to offer an alternative to the city's park plan. Because of the Japanese government's strong preference for the following precedent rather than proceeding with work for which there had been no demonstrated results, Mr. J proposed temporarily attempting to regenerate *satoyama* in the proposed site for Maioka Park so that his proposal might be more acceptable to the government. This proposal was accepted, and the group obtained permission to use the proposed site for the park. They revived rice production in fallow fields, resumed management of coppices, implemented related agricultural activities, and began environmental education activities. Through this citizen-proposed social experiment, they developed an experience-based program while accumulating *satoyama* management know-how and demonstrated concrete alternatives based on the results of that program. As a result, the final design for the park was drawn up in a form that reflected many of the proposals. Furthermore, these ambitious initiatives were evaluated by Yokohama City, and when the park was opened in 1993, responsibility for the management and operation of Maioka Park was given to an NPO formed from the basis of this citizens' group, which has continued to manage the park ever since.

The example of Maioka Park reflects the characteristics of the Satoyama movement. The main approach of nature conservation movements at that time was to request that the government regulate development on land that should be protected. On the other hand, because the land that required protection in Maioka was *satoyama*, work was necessary in order to preserve it. However, it was not expected that citizens would undertake agricultural or forestry work in a city park, and naturally, there were no rules regarding the treatment of rice, vegetables, or wood obtained through such management activities. Accordingly, in order to bring about something unprecedented in a city park—in order to resume activities that had continued from before the space became a park—a citizens' group undertook a social experiment in *satoyama* management, presenting an alternative park plan based on their experience through this trial and error process and taking on the management and operation after the opening of the park. In other words, the Satoyama movement became a movement trying to create environmental self-government; opposing the situation established by the government regarding the appropriate form for remaining *satoyama* now that the relationship between people and nature had weakened; creating a new community of people to take care of local nature; and creating a *satoyama* commons suitable for the values of the times.

Because of the success of Maioka Park, when developing *satoyama*-type parks, Yokohama City now seeks to create scenarios that envision citizens undertaking the management and operation after opening. Citizens are brought together and listened to from the beginning of the planning stage, which is reflected in facility development, and the formation of groups by participants is encouraged. This form of progressing with park creation involving citizen participation is Yokohama City's way of responding to an era in which parks systematically set up according to government-led designs were criticized as "uniform and boring," and people questioned "to whom does the park belong?" Today, the doors of citizen participation are wide open, the result of the pioneering Satoyama movement, and the government has come to expect that citizens voluntarily participating in public landscape creation will be good collaborators.

5.3.3 *Satoyama* Governance by Diverse Actors—The Example of the Niiharu District

Attempts to stay ahead of the times face challenges faster than anywhere else and require further change to overcome them. In order to understand how the work of the Satoyama movement has progressed in Yokohama City since Maioka Park, let us next turn our attention to the Niiharu District, Midori Ward, from the latter half of the 1990s.

The Niiharu District area is positioned as one of the "Seven Major Green Bases" for which Yokohama City prioritizes conservation. Of these, the Niiharu District (where more than 100 hectares of forest and farmland have been retained) is regarded as a strategically important area in Yokohama City's *satoyama* conservation strategy. In order to conserve the *satoyama* in this Niiharu District, Yokohama

City applied the "Citizens' Forests" system to privately owned land and implemented the organization of parks with citizen participation on publicly owned land.

In the latter half of the 1990s, when Yokohama City began preparations for the designation of forests in the Niiharu District as "Citizens' Forests," the majority of the landowners had not been managing their land for several decades. Furthermore, because the landowners were themselves elderly or were not living nearby, they could not themselves form a protection association and manage the land even with subsidies from the city.

In order for Yokohama City to open "Citizens' Forest," a protection association was needed to manage them, but at that time there was an increasing number of places like the Niiharu District where the landowners were unable to take on that role. Therefore, since 1994, the city had been implementing projects to connect *satoyama* that require work with ordinary citizens who want to participate in the conservation movement. These projects involved holding a series of courses to equip people with the necessary knowledge and skills for *satoyama* management and supporting attendees so they are able to organize and create *satoyama* conservation volunteer groups once or twice each year. Therefore, in the Niiharu District as well, the city planned for the organization of a protection association that included citizens interested in conservation activities, rather than only landowners.

Between July and December 1999, Yokohama City held a series of lectures for 60 citizens with an interest in *satoyama* conservation in the Niiharu District, with the objective of providing them with an understanding of the situation in the area and the skills for conservation management. Some of the landowners were wary of outsiders entering the local *satoyama*, but a series of dialogues over six months with the citizens who gathered after the public advertisement caused a change in sentiment and acceptance. The intermediary of local government officials made the landowners feel safe to talk with the citizens in a safe manner and were able to get to know each other smoothly. Then, in February 2000, the "Niiharu Citizens' Forest Protection Association" was created, with an unprecedented 113 members, and the "Niiharu Citizens' Forest" opened in March, boasting an area of 67 hectares which made it the biggest Citizens' Forest in Yokohama City.

There was one landowner, Mr. O, who had summarized the opinion of many landowners on the designation of Niiharu as a Citizens' Forest. However, he suddenly passed away in October 2000, after the Citizens' Forest had opened and at the request of his bereaved family his mansion and the surrounding forest were donated to Yokohama City. Respecting the last wishes of the deceased, who had tried to protect the Niiharu *satoyama* landscape, the city prepared plans for the organization of a city park on that land. These plans proceeded with the citizen participation model, based on the developments in park creation in Yokohama City that had continued on from Maioka Park.

In 2003, Yokohama City opened the former mansion of Mr. O, which plays a key role in the park, and established a "Council for Reviewing the Use of the Former Mansion of Mr. O," consisting of representatives of nearby organizations with an interest, as well as general participants who went through a public selection process.

The council held discussions about mechanisms and rules for use of the facilities and about the creation of a body responsible for their operation. From 2004, this council transitioned into the "Executive Committee for the Use of the Former Mansion of Mr. O" and was trained as an organization responsible for the operation of the facility, while conducting independently planned trial projects for the continuation of *satoyama* nature and culture. In 2009, the former mansion of Mr. O was renamed the "*Niiharu Satoyama Kōryū Center* (Niiharu Satoyama Cultural Exchange Center)" and Niiharu Satoyama Park was opened; immediately after opening, an NPO was established on the basis of the executive committee and took charge of management and operations.

In this way, in order to conserve the city's largest *satoyama*, land was designated and set out as a Citizens' Forest and city park, while active citizen participation was encouraged and the organization of management bodies was supported in order to care for them. Additionally, the Niiharu Citizens' Forest represents *satoyama* in Yokohama City, so the city gave its support and set up conservation and management plans and continues to advise the protection association on adaptive management on the basis of these plans (Uchiyama 2010; Yokohama City 2011). Furthermore, though not introduced in this chapter, Yokohama City has also implemented its own projects with respect to farmland and rivers in this district as well and has established a comprehensive system for *satoyama* conservation. As a result, a system has been established in the Niiharu District involving cooperative planning by government, citizens' groups, and landowners, for the integrated conservation of the forests, parks, farmland, and rivers that constitute the *satoyama* landscape, with the "Niiharu Satoyama Cultural Exchange Center" as its base. This system is regarded today as best practice for *satoyama* governance in Japan.

5.3.4 The Evolution of Environmental Governance and the Responsibility of the Coordinator

It should be noted, however, that going forward does not necessarily mean that one is making progress. *Satoyama* lands around cities are considered highly public areas that require conservation, even though they may of course include both public and private lands. Accordingly, the civil society of today expects highly transparent decision-making processes from actors associated with *satoyama* conservation, as well as highly effective conservation impacts at low cost. Responding to these demands in good faith requires that the actors involved establishing conservation plans democratically, conduct conservation activities that demonstrate as much initiative as possible, and review and provide feedback into plans while monitoring and clarifying the results of such initiatives—that is, adaptively and collaboratively managing *satoyama* ecosystems. That being so, the advances in *satoyama* governance observed in the Niiharu District can be seen as inevitable outcomes reached when striving to meet the demands of civil society.

The concept of eco-governmentality, which uses Michel Foucault's idea of governmentality, is useful in such an analysis (Darier 1999). "Governmentality"

refers to the internalization by people of certain norms and rationalities, and factors (such as knowledge and power) influencing how they act as subjects. In order for economically rational governance to function in a neoliberal society, citizen volunteers are encouraged to find problems that small government cannot address and to try to independently find solutions to them. Eco-governmentality, on the other hand, extends this concept not only to social systems but also to socioecological systems. In today's civil society, consideration of the environment is an important value, in addition to values ascribed to liberty and democracy. In order to adapt to a society governed through eco-governmentality, it is necessary to internalize a mindset or mentality of concern for the environment—that is, environmentality (Agrawal 2005).

From a third-party perspective, the evolution of eco-governmentality around *satoyama* seems completely appropriate. It is difficult to argue against a form of governance that maximizes *satoyama* ecosystem goods and services, based on democratic decision-making among actors, and takes advantage of public funding while also involving as much volunteer initiative as possible.

However, how do things look from the perspective of those responsible for *satoyama* conservation? In the Niiharu District, citizens are required both to work as needed to conserve biodiversity in the Citizens' Forest Protection Association and to take on suitable responsibilities as city park managers. For example, a particularly large governance burden was placed on Ms. Y (born in 1964), executive secretary of the NPO that operates Niiharu Satoyama Park and a key person for *satoyama* governance in the region. She reports that, in addition to the large volume of office work imposed by the city, she is also required to allocate a great deal of time to coordinating affiliated groups and government officials with whom she is collaborating and also has her hands full dealing with case study inspections, cooperating with academics and students on research, among other duties.

The existence of Ms. Y, who has been operating the Niiharu Satoyama Park and organizing a range of actors for many years, with a wealth of knowledge and experience relating to *satoyama* conservation, is a significant factor in the strong functioning of *satoyama* governance in the Niiharu District. Responsible local government staff rotate positions every 3 years or so, meaning that citizens with continuing involvement in the region are better placed than government staff to coordinate efforts relating to *satoyama* conservation in the district. In fact, because there is insufficient time for a proper handover of work within the government office every time the responsibilities of government staff change, asking Ms. Y to take the lead in these situations has become the norm.

However, because it is difficult to objectively evaluate her expertise as a coordinator, the salary paid to Ms. Y as executive secretary is kept at the level of the minimum wage, which is extremely low when compared to equivalent local government staff. NPOs may be organizations with an objective other than the pursuit of profit, but having specialist knowledge and experience, and the expertise to be able to coordinate volunteers, should surely be properly valued. Even so, NPOs are perceived as charitable organizations by the government, and there is a common perception that NPO staff can be treated as unpaid volunteers or part-time workers at

most. Ms. Y said, "The city government is asking us to work at the minimum wage level, so I don't think we're in a position to take responsibility. We don't earn enough money and yet we are even assigned detailed responsibilities." Even though she is proud to be involved in the conservation of *satoyama* that represents Yokohama City, she also feels that she is too ready to take on a similar level of work to government staff and often questions whether she can continue to work the way she is currently treated.

With the evolution of eco-governmentality, actors who progressively improve ecosystems through the pursuit of economic rationality and democratic decision-making processes become "environmental subjects" (Agrawal 2005). In socioecological systems governed by eco-governmentality, adaptable actors are cultivated as environmental subjects. The grumbles and frustrations one can hear from key people in *satoyama* governance in the Niiharu District seem to indicate the limitations of acting as exemplary environmental subjects.

A neoliberal reform of public services in Japan was carried out in the 2000s with cries of, "From 'public' to 'private'," and, "From government to governance." In particular, the Koizumi administration (2001–2006), under the economic policy slogan of "structural reform without sanctuary," promoted a policy of cutting public services by the government through privatization and other measures. However, even with loosened regulations, as can be observed in *satoyama* governance in the Niiharu District, important matters such as the forms of cooperation and ways of improving treatments are still positioned under government initiatives. Therefore, citizen actors who cooperate with the government are liable to change into low-cost supplements for administrative functions.

These issues cannot be solved merely by holding government accountable. This is because such a transformation is desired in civil society, in which personal liberty is respected and which demands the accountability of democratic transparency and processes. Civil society has actively introduced third-party evaluation in order to eliminate vested interests and obligations. Civil society has called for rigorous quantitative assessments of environmental, economic, and social outcomes in order to know the cost-effectiveness of public services. This congregation of citizens demanding objective evaluation on the basis of distrust has gradually strengthened eco-governmentality.

5.4 The Limits of the Government-Led Satoyama Movement

5.4.1 Approaching Eco-nationalism and Volunteer Mobilization

In narrating the Satoyama movement from its source, its origin was with citizens more than with the landowners taking ownership of the problem of the abandonment and degradation of secondary nature that people had managed for many years, building a movement in order to create a community that would independently manage such areas as new commons. However, as is evident from the discussion to this point, the movement demanding environmental autonomy may become just

another cog in the governmentality machine, taking on functions required by the socioecological systems increasingly governed by eco-governmentality. How should we respond to this soft form of governance? In order to consider this question, let us move away from the example of Yokohama City and look at the development of the Satoyama movement since the 2000s.

From the 2000s, when *satoyama* conservation was adopted as a national political objective, government documents have been seen to make an easy connection between nostalgia for *satoyama* and nationalism. In the "2010 National Biodiversity Strategy" (Ministry of the Environment 2010), for example, because "Rather than standing in opposition to nature, the Japanese people [have formed] a diverse culture that cultivates various forms of knowledge, technique, distinctive arts, and rich sensitivity and aesthetic awareness, in forms that respond to nature," it is stipulated that people should "learn the traditional wisdom and perspectives on nature that have valued nature and resources, which are limited (as seen in *satoyama*)." Here, one can recognize eco-nationalist ideas, looking to solve environmental problems by spreading the traditional culture of one's own country or ethnic group. Adoration for *satoyama* based on such an ideology can be criticized for taking up only one aspect of the past, which is desirable to people today, while ignoring past problems such as pollution. Not only has the ideal relationship between people and *satoyama* that the government is praising almost vanished in modern Japan, but it cannot be said that *satoyama* landscapes were always good environments even in the past. Research in environmental history has shown that there are many forests blessed with abundant greenery today that were bare mountains or grassland in the past (Chiba 1956[1991]; Totman 1989; Matsumura and Kohsaka 2010; Ogura 2012).

Despite these issues, while the government vigorously pushed for neoliberal reform, local governments in various areas tried to nurture citizen volunteers to manage poorly maintained public lands, in order to achieve the goals of *satoyama* conservation. The Forestry Agency launched the Forest Volunteer Support Office in 2003, increasing the number of groups working to maintain forests for public benefit by promoting a national movement to accelerate such activity.

Figure 5.6 shows changes to the number of groups subject to the "*Mori Zukuri Katsuyō ni tsuite no Jittai Chōsa* (Survey into the State of Forest Creation Activities)" conducted every 3 years by the Forestry Agency. The number of groups increased steadily since the start of the survey in 1997. However, there has been a stagnation or slightly downward trend since coming into the 2010s, and it seems that membership has stalled and participating members are aging, with a not insignificant number of groups in a dormant state.

Specifically, Fig. 5.7 shows responses to the question of which age range most participants in each group's activities belong to, and two-thirds of groups responded that most participants are in their 60s or over (1325 valid responses); many groups are facing the problem of whether or not they will be able to continue in the future,

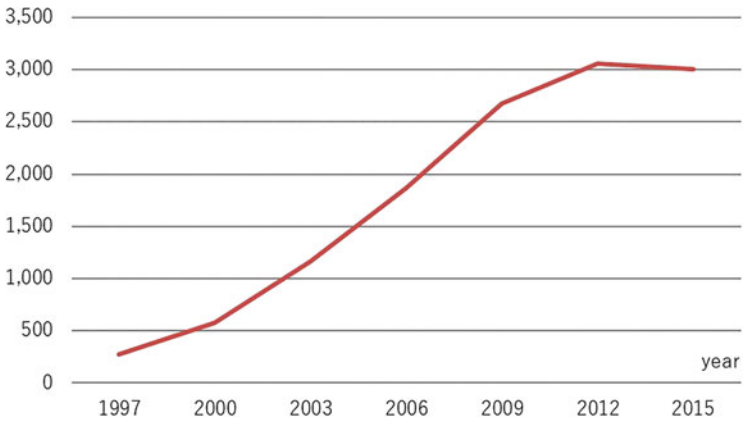

Fig. 5.6 Numbers of groups subject to the "*Mori Zukuri Katsuyō ni tsuite no Jittai Chōsa* (Survey into the State of Forest Creation Activities)" (Created with data from the Moridukuri Forum (2016))

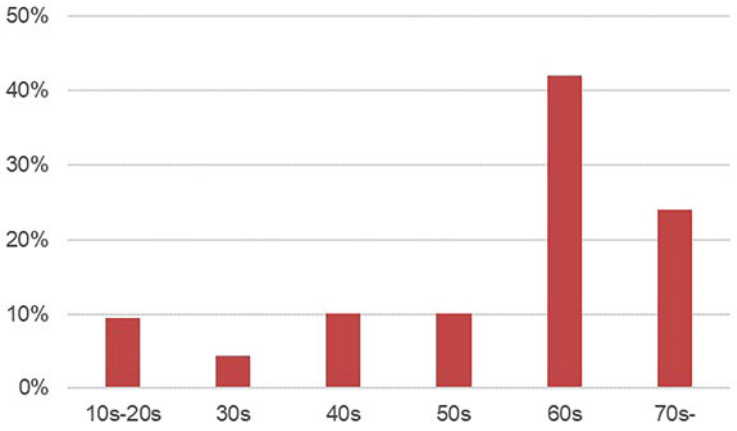

Fig. 5.7 Age range to which most participants in group activities belong

due to young membership not increasing.[5] Volunteer activities taking responsibility for *satoyama* conservation have been promoted up to this point, but there seems to be no way to break through the impasse today.

[5] Based on results from the 2018 "*Mori Zukuri Katsuyō ni tsuite no Jittai Chōsa* (Survey into the State of Forest Creation Activities)" conducted by the NPO Moridukuri Forum with assistance from the Forestry Agency.

5.4.2 The Significance of Citizen Participation Breaking From Governmental Environmental Policy

Why have efforts by national and local governments to mobilize volunteers to promote *satoyama* conservation not been effective?

For one thing, there is a shortage of volunteers. To begin with, abandoned *satoyama* covers a vast area that cannot be managed through a reliance on volunteers. Nevertheless, until the early 2000s, there were many people who participated in volunteer activities as a second life after reaching their 60s and retiring. However, in 2004 retirement age was mandatorily extended to 65, and it appears that the number of people who think they will work during their working years and then head into volunteer work after retirement has decreased. Additionally, Japan's population peaked at 128 million people in 2008 and then entered a period of decline, with an accumulation of social problems associated with a declining birthrate and aging population (such as pensions, health care, and nursing). In today's world, in which it is difficult to forecast prospects for the future, it seems that even if young people have a high environmental awareness and strong sense of social responsibility, it will be difficult for environmental conservation volunteer activities to continue.

As another reason, one can point to the fact that the significance for people participating in the Satoyama movement is being neglected. Unlike conventional nature conservation movements that involve the protection of nature from human interference, this movement was a novel approach whereby humans actively intervene in order to preserve nature. Previously, the relationship between humans and nature had to be eliminated whether one was protecting nature or pressing on with development. In contrast, the Satoyama movement from the 1980s to 1990s reestablished, in a form appropriate to the times, the relationship between humans and nature that had formerly been observed in *satoyama*, and saw citizen participants creating new commons for themselves through collaborative and adaptive management. Where urbanization had led to a decline in nearby green spaces, and remaining *satoyama* lands were protected by the shield of a green lands system, the Satoyama movement had succeeded in fundamentally questioning the tendency of government to monopolize decisions about the appropriate form for those spaces. Therefore, if the activities of the people involved are evaluated by the government only in terms of biodiversity conservation and wrapped up in its environmental policies, then it will become difficult for this citizen-inspired movement to exercise and enhance its potential.

For example, there are many restrictions on activities in *satoyama* managed by the government. Although people used to make bonfires in *satoyama* and use blades for their management, the use of fires and blades is prohibited in order to avoid risks, due to their dangerous nature. This makes it extremely difficult to pass on important cultural aspects of *satoyama*. Furthermore, because it is a principle of volunteer activity that it be uncompensated, it is not permissible to generate profit by using the resources generated from *satoyama* conservation work. Additionally, uniform fairness is emphasized, and people with a deep connection to the land are treated equally

to those visiting it for the first time. Meanwhile, in order for conservation activities to receive government approval, an enormous amount of work is required preparing complicated documents.

Under such constrained conditions, it is difficult to pass on the *satoyama* culture that has been handed down in a region, the cyclical use of resources comes to a halt, and it becomes challenging to foster a sense of self-government based on collaborative and adaptive management. Still more, the *satoyama* that do remain together around cities are put under the shield of a green space conservation system in which involvement with *satoyama* is only possible under government control.

5.5 A Quiet Movement to Make Use of *Satoyama* in City Suburbs

5.5.1 A *Satoyama*-Oriented Lifestyle and Perspective on Work

What are the essential values and practices of the original Satoyama movement, and how can they be passed on to a new generation of citizens? In order to answer this question, let us look at activities that young people have been undertaking in *satoyama* in city suburbs in recent years.

The 2008 global financial crisis and the 2011 earthquake served to show modern urban residents how fragile a system their lives had been entrusted to. In particular, the Tōhoku earthquake, tsunami, and the Fukushima nuclear disaster of March 11, 2011, made us realize what our lives had been supported by. After that, large-scale demonstrations against restarting nuclear power plants occurred at many locations, including in front of the prime minister's official residence; even in Japan, where international comparisons show that a remarkably low proportion of people participate in demonstrations compared to other countries, it was said that ordinary people started participating in demonstrations. Since the Fukushima nuclear disaster, public opinion in favor of abandoning nuclear power has remained at high levels[6] but even in the fifth Strategic Energy Plan, revised in 2018, nuclear power remains an important source of baseload power, and it is written that measures for reactivation and the handling of spent fuel which prioritize safety are being steadily advanced.

Some people, having gone through such times, may feel that nothing has changed even after the occurrence of this severe nuclear disaster. On the other hand, however, people have emerged who are trying to autonomously create a living from the resources and spaces of *satoyama*, which have limited market value, and improve the areas in which they live for themselves to the extent that they are able to take the

[6] According to a nationwide public opinion survey conducted by the Japan Atomic Energy Relations Organization in 2019, 61% of people want to end nuclear power, compared to only 11% who want to increase or maintain its use. (accessed July 7, 2020: https://www.jaero.or.jp/data/01jigyou/tyousakenkyu_top.html).

initiative, rather than trying to change society by changing the larger political situation.

One aspect of such efforts is introduced in "*Satoyama Shihonshugi* (Satoyama Capitalism)," published in 2013 (Motani and NHK Hiroshima Bureau 2013). The term "Satoyama Capitalism" was coined with the idea of indicating a contrast to money capitalism, which relies on the procurement of money from global markets, and referring to another way, the idea of linking the unused resources of *satoyama* to economic activity. The book introduces examples such as power generation and heat supply using local wood biomass, jam production adding value to the local special fruits, and using abandoned arable land for grazing. These social businesses are provided as illustrations of the potential for businesses that make use of dormant local *satoyama* resources with the hope of revitalizing the regions as a counterbalance to overconcentration in Tokyo, and so their objective was not *satoyama* conservation. However, if commercialization is successful and abandoned *satoyama* are properly used, this could be connected to the conservation of biodiversity and ecosystem goods and services. Thinking this way, the potential of social businesses based on Satoyama Capitalism suggests itself as a way to counter the stagnation of the Satoyama movement, rather than trying to expand volunteer activities.

This movement is spreading steadily not only in regions blessed with vast *satoyama* resources, but also in the suburbs of the Tokyo metropolitan area. Many of its practitioners reconsidered their disconnected urban lives as a result of 3.11. In fact, in the fields of energy, environmental education, health and welfare, and community development among others, social entrepreneurs creating new jobs based on local nature and culture, and new farmers, have been appearing in urban areas. For example, there are people who climb high trees with ropes to perform pruning and trimming work, people who work on carpentry with wood from coppices, people who offer programs to experience nature in *satoyama* for children, people who have rented abandoned fields and turned their hands to farming, people who run events inviting urban residents to *satoyama*, and people who maintain bamboo groves as employment support and social participation for people with early-onset dementia. There are also people who, while maintaining a main business, create bread or processed agricultural goods by hand with an expertise in the locality, and people working on crafts or miscellaneous goods. People who operate local markets where such people congregate can also be reasonably included in this movement. These people are mainly in the late 20s to early 40s age range, overlapping with so-called millennials (Ito 2012; Matsunaga 2015).

They are trying to create jobs that make use of local *satoyama* resources at a level that is sustainable. Aiming for an appropriate work–life balance that does not overly focus on economic activity, they are very interested in a simple life that constrains unnecessary spending and considers how to generate profit without recklessly increasing sales. Working in city suburbs, they can start a social business by renting land and facilities at low cost using their personal network, creating websites at no cost, and raising money through crowdfunding. They respond to requests from the government with an awareness that they are not dependent on the government. They

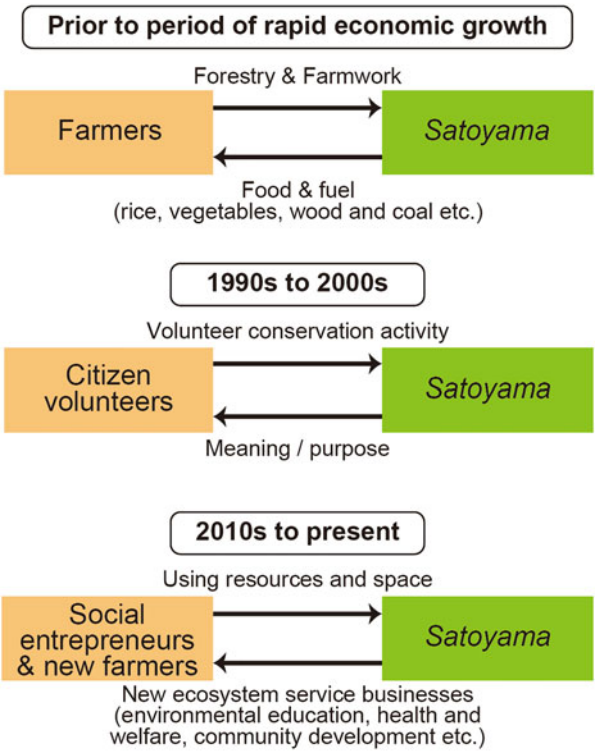

Fig. 5.8 Changes to the relationship between people and *satoyama*

are trying to create the kind of work that they would like in the society of the future, while taking on risks themselves as practitioners.

Each of these efforts is small in scale, has an individual character, and a different visual form. Nevertheless, they are each loosely connected and form a network that can cooperate when necessary. It appears that there is a shared sense of the times and of a set of values that underlies their activities, and this could be recognized as a quiet movement. And while it may currently be difficult to recognize in these efforts the politics that appears in traditional social movements, this voluntary latent network may itself be a modern social movement.

These activities may be similar to the ecosystem conservation activities of citizen volunteers in terms of taking place in *satoyama* lands, but they have followed a separate path of development. They are interested in *satoyama*, which are unused local resources, due to a focus on the local level against a background of unceasing globalization and a hope for social businesses that create solutions to environmental and social problems through economic activity.

Figure 5.8 sets out changes to the relationship between people and *satoyama* in city suburbs, as described above, in three stages. (1) Before the period of rapid economic growth, farmers undertook forestry and worked in the fields in order to obtain food and fuel, but after the fossil fuel revolution there was an increase in areas that could not be maintained. (2) From the 1990s, citizen volunteers started

participating in *satoyama* management in search of meaningful work, and their activities spread throughout the country. However, as we came into the 2010s, there were problems with the numbers of participants stalling, and participants aging, leading to a rise in groups that were unable to continue with their activities. (3) After the Tōhoku earthquake and tsunami of March 11, 2011, and the accompanying nuclear disaster in Fukushima, there have been strengthening private efforts to create new ecosystem services and create work, as social entrepreneurs and new farmers use local *satoyama* resources to improve their regional environment and society.

5.5.2 The Potential for Creating Work Using *satoyama* in City Suburbs

Efforts since the 2010s to improve local nature and society in one's community have objectives in common with those of the Satoyama movement of the 1980s and 1990s. Might it not be possible to see these dispersed and individual efforts as the manifestation of a social revolution, albeit one that is occurring quietly and thence to amplify this swell of effort? Thinking along these lines, I launched the "*Machi no Chikaku de Satoyama o Ikasu Shigoto Zukuri* (Creating Work using Satoyama in City Suburbs)" project in 2016. Specifically, I have created a widened network while holding frequent symposia and workshops for those interested in this latent set of values and set up a website in collaboration with volunteer groups in order to present such efforts. Rather than providing direct support for entrepreneurship and the establishment of businesses, this is creating a space where those with an interest can exchange necessary information with each other and a space where subsequent action can arise in context. Indeed, new local markets have begun, and new organizations with the objective of fostering leaders in *satoyama* regeneration activities have been formed, as a result of people meeting in this space.

The reference to "Satoyama in City Suburbs" in the project name reflected a desire to take on the current of the Satoyama movement, which began from city suburbs. Also, because there are many people who have a conception of work as something done in cities and living as something done in the countryside, there is also the conviction here that work and life can be achieved in city suburbs. *Satoyama* in city suburbs are not large, but characterized by an abundance of people living nearby. The value of this land would surely increase significantly if comprehensive services such as education, medical care and welfare, sightseeing, and recreation could be offered to the urban residents living close to *satoyama* in these areas.

The word "*Shigoto*" within the project name is also important. The philosopher Uchiyama Takashi noticed that there were two types of traditional regional community labor in Japan: "*kasegi* (earning)" and "*shigoto* (work)". The term "kasegi" refers to labor that the villagers do not really want to do but are forced to do in order to earn money. In contrast, what is expressed in the term "work" is something that must be done in order to live in the village. For example, they had to grow subsistence crops on the field, manage trees in the mountains, fix the roads in

collaboration with the neighbors, attend village meetings, and protect the family. In other words, "*kasegi*" is the undertaking of labor for money and "*shigoto*" is human activity that maintains local nature and society, and the lives of those involved. (Uchiyama 1988). The efforts of young people visible in *satoyama* lands in city suburbs are clearly oriented toward "*shigoto*" rather than "*kasegi*". Living in a low-growth era, what we need is to consciously create work in order to improve the nature and society around us, rather than earning in order to support consumption.

I started this project because I wanted to accelerate efforts to protect places where people can live independently, by shifting the topology of political and economic movements. Of course, political and economic trends have a major influence on the lives of individuals. However, the nature of this influence is uncertain, and the period of slow economic growth can be expected to continue. In order to survive in such a society, it would be good if we were able to acquire the ability to assemble sustainable lives for ourselves and to maintain and manage the surrounding environments that support such lives. In order to achieve this, we need to work and create value from the resources of *satoyama*, which are not valued by neoliberal and conventional markets. We also need to perceive their noneconomic value and use such valuations to improve quality of life. Learning the techniques to achieve this would serve us well. Furthermore, the *satoyama* in city suburbs could be described as a treasure trove of unused resources, an environment where we can use these techniques, and which can certainly contribute to solving urban problems other than simply the survival of individuals.

Satoyama regeneration will not progress if biodiversity conservation is not established as an objective. It will progress energetically when people think of *satoyama* as necessary for living well together and try to manage *satoyama* ecosystems themselves. The trial and error of the Satoyama movement, which began in the mid-1980s, has continued up until today from both above and below, but has not yet arrived at its objective. Whether we are able to transform the relationship between people and nature and move toward a sustainable society in the future may be revealed by the direction taken by the work being creatively developed in *satoyama*.

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