Reeds and Rights: Dynamism of Legitimacy Construction in the Collective Management of Natural Resources

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Abstract

Attempts to advance environmental governance often encounter wicked problems such as contested images of nature, the issue of who qualifies as a stakeholder, and inherent difficulties in consensus building. Legitimacy in conservation is neither a simple nor a static concept. However, local communities often succeed in managing the establishment and recognition of legitimacy in adaptive ways. This chapter illustrates how legitimacy can be constructed and sustained in local collective management of natural resources, through a case study of the preservation of reeds (*Phragmites australis*) at a state-owned river mouth area in Kitakami, northern Japan. Reed beds appeared in this area in the 1930s following a government river improvement project, leading to discussion of local communities' collective rights to the reeds. The case study shows that the historical accumulation of local values such as collective memory, historical collectiveness, subsistence rights, profitability, and conservation values constructs the legitimacy of collectiveness and the status of diverse stakeholders.

Keywords

Kitakami River · Stakeholder-ness · Collective right · Subsistence right · Historical collectiveness

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2.1 Intricate Problems and Legitimacy

2.1.1 Intricate Problems

This chapter examines the construction of legitimacy of environmental governance, through a case study of reed management in northern Japan. The case study shows not what legitimacy "should be" but how it has been constructed and how it has changed over time.

Efforts to establish environmental governance often encounter wicked problems (Brown et al. 2010). What kind of nature is desirable? Who should be involved in conservation activities? What values should be prioritized? There is no simple answer to such questions.

Throughout the world, nature and human activities are intimately intertwined. In particular, the landscapes of the Japanese archipelago have formed through long and close interactions between nature and humans (Yumoto 2011). These interactions can take many forms, and no one can declare that a particular form is objectively the correct one. To use an ecological term, there are many possible points of equilibrium in human–nature relations.

For example, Ogura (1998, 2006, 2012) points out that many mountains in the Japanese archipelago were grasslands until the nineteenth century; now, they are covered with forests. It is impossible to resolve definitively the question of which form of nature is better. Grasslands are a source of fertilizer for agriculture and a contributor to biodiversity. Forests also play a vital role in sustaining biodiversity and enhancing human well-being. Hence, the so-called *Satoyama* conservation activities, a mainstream environmental activity in Japan today, not only simply aim at preserving wilderness areas but also aim at enabling diverse interactions between humans and nature in addition to resolving conflicts arising between different landscapes such as forests and grasslands (Washitani 2001; Takeuchi et al. 2012). Moreover, these interactions have no fixed set of historical or contemporary biotic conditions nor static point of equilibrium. This situation can create conflict in conservation activities, as different stakeholders vie to conserve nature in different forms.

Stakeholder-ness (i.e., who qualifies as a stakeholder) is another intricate problem. In many instances of environmental conservation, there is no clear answer as to who should be involved. One could perhaps try to resolve this problem by saying that everyone who wishes to be involved is a stakeholder, but there remain difficult problems of legitimacy, as some stakeholders may not recognize others' right to be considered equal participants.

Moreover, diverse values exist among stakeholders, or even among local residents. Sometimes, values are hotly contested within a community. Resolving conflicts between diverse values is not easy. Obviously, a consensus-building process is necessary. But there is never any shortage of opinions as to what kind of consensus-building measures are desirable and who should be at the table.

Since there is no simple answer to these problems, legitimacy is the key (Hogl et al. 2012; Cosens 2013). Legitimacy, as used here, refers to a situation or process in

which it is socially recognized or accepted that particular people will manage a particular environment in keeping with a particular value or set of values, and in the context of a particular system or set of institutions (Miyauchi 2006). In tackling stakeholder-ness and consensus building, we should construct legitimacy, on the basis of local contexts.

2.1.2 Reeds and Legitimacy

Despite the intricacy of these problems, we may learn the solutions from case studies in which local communities have dealt with problems of environmental sustainability. This chapter discusses one such case, investigating the dynamism of legitimacy in environmental governance by analyzing the history of reed bed management in an area of northern Japan known as Kitakami. The site is located at the mouth of the Kitakami River, one of Japan's largest rivers, which flows from northern Iwate Prefecture into Miyagi Prefecture. Kitakami is a typical marginally rural area; most residents used to be involved in agriculture and fishing, and many still are, although most now commute to nearby urban or industrial areas. The population, which was over 7000 in the 1950s, has dropped to 2300 as of 2020. The area has 20 hamlets—half of them along the river and the other half along the sea. Each hamlet has dozens of households. The river has a big reed bed of 100 hectares in the mouth area, one of the biggest reed habitats in Japan (Figs. 2.1, 2.2 and 2.3).

The reed species found here (*Phragmites australis*) is located in a government-owned area, since all rivers are considered government-owned in Japan. However, the local people have a history of shared management of and collective rights to the reeds and have established sustainable use and management practices. Residents cut and collect the tall reeds every winter, from November to March, and sell them. The reeds have been used mainly for the roofs of traditional temples and houses. There is no formal legal basis for this co-management; rather, it relies on social consensus. Moreover, the methods and purpose of reed management have changed over time. Therefore, this case study illustrates a process of socially constructed legitimacy and its historical dynamism.

2.1.3 Research Method

This study is based on a series of field research investigations carried out since 2004. Semi-structured interviews were conducted with more than 50 residents, most of whom were longtime community members with extensive knowledge of the local area's natural resources and social relations. These included farmers, fishermen, reed tradesmen, reed harvesters, local government officials, religious leaders, education leaders, community leaders, and housewives. Over 200 hours of interviews were recorded and transcribed. A wide range of archival documents, including local

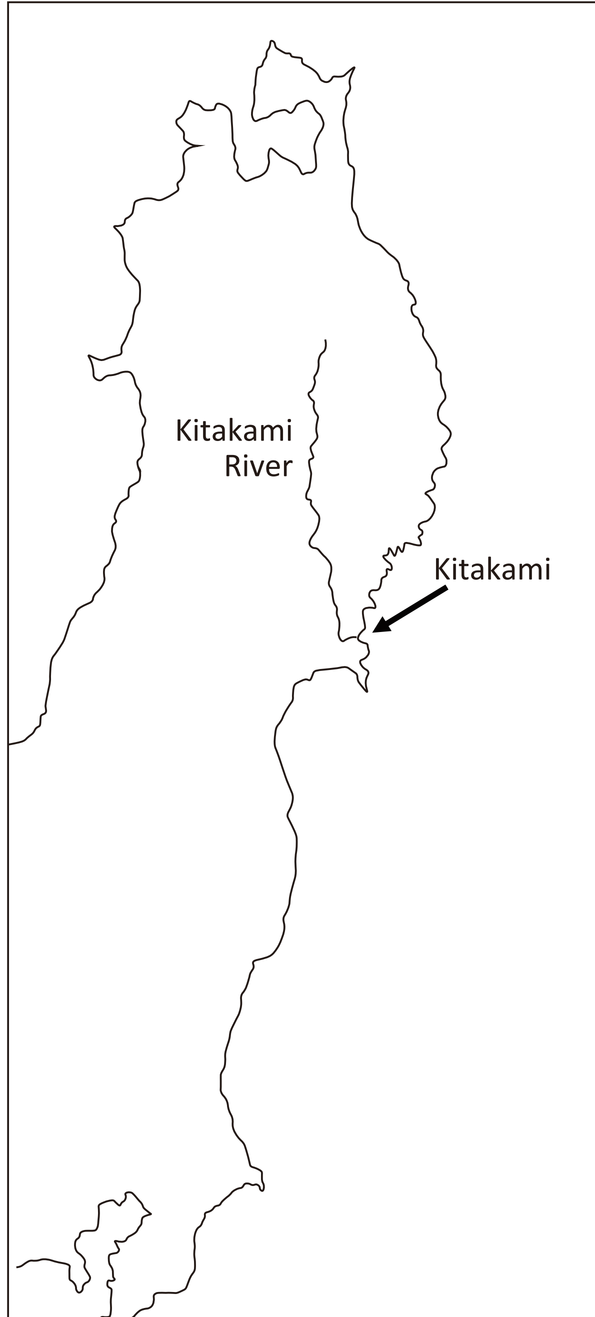

Fig. 2.1 Kitakami and the Kitakami River

Fig. 2.2 Reed bed in the Kitakami River mouth area

historical documents, newspaper articles, historical maps, historical aerial photographs, and community documents, was also collected and used.

2.2 History of the Reed Landscape in the Kitakami River

2.2.1 The River Improvement Project and the Appearance of Reeds

The reed bed in the Kitakami River mouth area is not a very old ecosystem. In fact, the area where reeds now grow was once occupied by houses and rice paddies. The reeds first appeared about 90 years ago, following a government river improvement project to address the frequent problem of river flooding. Most severely, a typhoon in 1910 caused massive floods, leaving 320 people dead and 357 houses washed away. This tragedy caused the government to institute a huge engineering project, which began in 1911.

The government built an additional shortcut river to control the flow of water. It also widened a narrow portion of the river where it connected to this newly built shortcut. The original river was widened to increase its water capacity and thereby avert flooding. To do this, the government had to evict residents of the former riverside area, which is now part of the riverbed. Negotiations with residents led

Fig. 2.3 Reed collecting in Kitakami

eventually to a compensation agreement, although some people remained dissatisfied with the amount.

Soon after this major national project was completed in 1933, a huge reed bed appeared in the river. Although a small number of scattered colonies of reeds had grown among the rice paddies previously, the reed bed in the new riverbed was huge and thick (Figs. 2.4 and 2.5). The appearance of these reeds generated conflict among the nearby communities over the right to collect the reeds, which had a high economic value at that time. Violence erupted between hamlets, which had historically been independent, each with its own autonomous governing organization. In particular, two communities of people who had suffered eviction as a result of the river improvement project strongly asserted their right to the reeds.

The conflict was finally resolved by an agreement that each community had a right to the reeds. The hamlets set up borderlines delineating the area granted to each one. Figure 2.5 shows the borderlines, which have been maintained to this day. The two hamlets with residents evicted from their former homes acquired a larger area than others but were not the only ones granted access to a share of the reeds. This arrangement was set up not as a statutory right but as a de facto right, similar to a customary right.

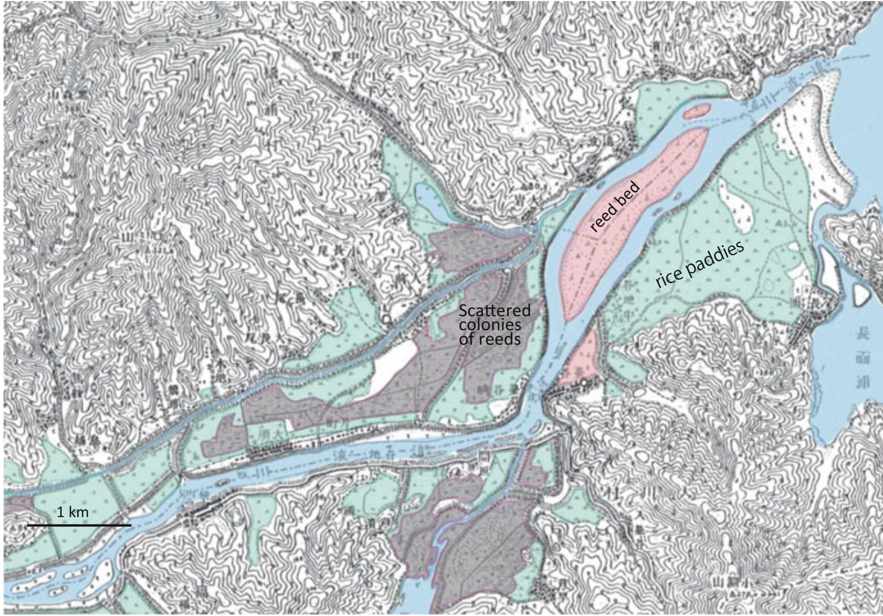

Fig. 2.4 Reeds before the river improvement project (1915)

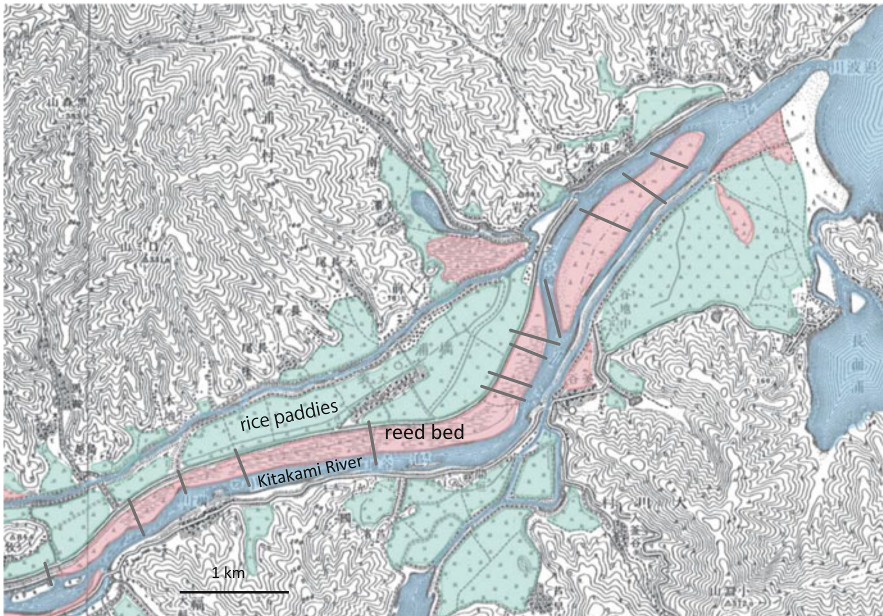

Fig. 2.5 Reeds after the river improvement project (1936)

2.2.2 Collective Right

Importantly, this right to the reeds was established as a collective right, even though the houses and rice paddies had been owned by individual families prior to the river improvement. Each community received a reed area for its own use, and no individuals or households could use the reeds without the community's permission. The *Keiyakuko*, a traditional autonomous community-based body that serves as both a governing body and a mutual-aid organization, oversaw the exercise of harvesting rights. Each hamlet also had a Shinto religious institution and owned common property, mainly community forest. Such communities are called *mura* or *buraku* in Japanese.

Historically, the people's use of the reeds can be divided into several stages. During the first stage, in the 1930s and 1940s, members of these communities collected the reeds and either used or sold them individually. Some communities set up cooperatives for the production of *norizu* (reed sheets) used to dry edible seaweed. The people harvest young reeds to make *norizu*, adhering to their own rules. The cooperatives then sold the *norizu* to outside markets. During this stage, the harvesting rules were strictly defined; only one person per household could cut the reeds during a particular period of several days in August.

During the second stage, beginning around 1950, some communities stopped making *norizu* and sold their annual reed harvesting rights to local businessmen, while other communities continued to produce *norizu*. Local businessmen paid a royalty to each *Keiyakuko* and collected the reeds before selling them to several markets. At that time, the reeds were sold for *norizu*, *yoshizu* (reed screens), *komai* (wall material), and roofing.

The market gradually expanded beyond the local area—for example, to Niigata Prefecture, where there was heavy demand for the reed as a wall-construction material in the 1970s and 1980s. During this time period, community rules still governed the local businessmen's activity. Royalties from the sale of rights funded community facilities such as assembly halls and religious facilities; the money was never divided among individuals.

In the late 1980s, reed harvesting declined because of market shrinkage. However, in the 1990s, local reed businessmen revived large-scale production of reeds, seeking to reach a national market. Today, although some communities are not concerned about the reeds because royalty amounts are very low, several others still maintain their rights and sell them to local businessmen on an annual basis. Meanwhile, this huge reed area maintained through sustainable harvesting activities of harvest is highly acclaimed as an iconic natural site, one of the few precious reed fields in Japan.

Figure 2.6 illustrates the history of local reed use, showing variations by community, in conjunction with the ecological status of the reeds. In earlier times, the reeds in the upper portion of the river mouth did not grow densely and were not suitable for harvesting, whereas the reeds downriver grew densely. Those closest to the river mouth were dense but not tall. These differences led to different uses. Nevertheless,

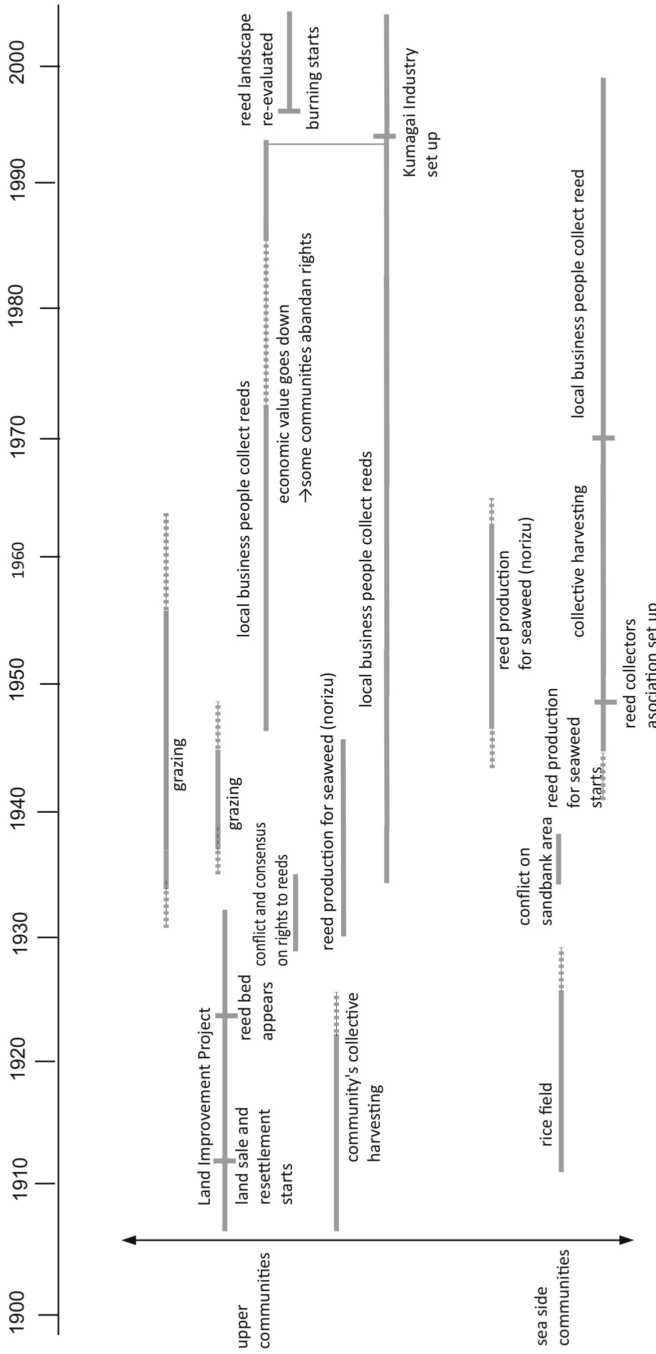

Fig. 2.6 History of reed use in the Kitakami River mouth area

the evolution of reed use, from private local uses to profitable business activity, was similar in all communities.

2.2.3 Why Have Collective Rights Been Sustained?

The communities have sustained strong collective rights, which have in turn maintained the reed ecosystem. The river is officially owned by the central government and is under its control, consistent with Japan's River Law. However, the historical customary right of community members to collect reeds belongs to the local communities, and the government cannot intervene in this activity. In terms of official procedure, the communities are required to obtain permission from the government each year to harvest the reeds. They file applications with the government and pay fees as stipulated by the River Law. Significantly, the government recognizes the communities' rights, even though they are not statutory but only de facto, and grants permission almost automatically every year.

In the late 1980s, as noted above, some communities abandoned their rights because the economic value of the reeds had dropped precipitously. However, when their market value improved again—albeit only to a moderate level—one community reclaimed its right. When it revived the official procedure for receiving permission for reed harvesting from the central government, the local society acknowledged the legitimacy of this right as well. The fact that an abandoned right could be restored in this manner without opposition reflects the robustness of the right and the historical local institutions through which this right is mediated.

Before the river improvement work, the area that now contains the reed bed was private property, used for either individual houses or the respective residents' rice paddies. But after the reed bed appeared, the right was assigned to the communities, not to individuals. The communities have retained the collective nature of this right and have not divided it into individual segments. They have set up their own rules for use of the reed bed.

One may wonder why this strong collective right arose and why it has been sustained. In fact, members of the communities did not use the reeds for a long time. Some communities stopped using the reeds in the 1950s, though others continued harvesting until the 1970s. The right to them was not traditional or customary, since there were no reeds before the river improvement project. But the collective right has long been recognized by both local society and the government. Why? What produces its legitimacy?

2.3 Factors of Legitimacy

2.3.1 Collective Memory

No single factor is responsible for the legitimacy of this right. Rather, it is based on several historical factors, among which the first is historical continuity or collective memory. This community memory dates back to the time when individually owned rice paddies were located where the river now flows. Although the land was transferred to the government, the memory of ownership was maintained among the people and contributed to the legitimacy of local rights. The local people still consider the territory presently occupied by the reeds to be strongly related to them.

In interviews with local residents, the word *enko* ("special relation") was used frequently. One resident said, "The government respected *enko* because that riverside area used to be our rice paddies." Another commented, "The community obtained the reeds due to this *enko*." The term *enko* originated with the government, which uses this word when it grants permission for the use of state-owned land; in this instance, the local people have appropriated the concept for their own purposes. *Enko* is closely connected to the right to the reeds in local discourse, with interviewees making statements like "The government gave us the right" and "The right to the reeds has been maintained." The memory of the rice paddies produced the local right to the reeds, based on the discourse of *enko*. This claim supports the argument that historical continuity is a factor in establishing the legitimacy of the right.

2.3.2 Historical Collectiveness

The second relevant factor is historical collectiveness. The communities in this area have many internal organizations and institutions, among which the *Keiyakuko*, described earlier, is the most powerful. Other organizations include the production associations (such as the *norizu* cooperatives), *yui* (a mutual-aid system), *shinrui* (clans), and *shinseki* (kinship networks). The *yui* functions when people need extra laborers for tasks such as harvesting and roofing. People clearly distinguish *shinrui* from *shinseki*. A *shinrui* is a patrilineal kinship group which unrelated persons can join if permitted. There are also two women's groups, *Kannonko* and *Nenbutsuko*. Both were originally religious bodies but now function as social organizations; *Kannonko* is for young housewives, whereas *Nenbutsuko* is for senior women.

The fire brigade is also an important community group. Although it is half voluntary and is devoted primarily to firefighting, it also functions as a local youth association.

These groups exist in each community in a multilayered way. People's lives are full of community activities, although these have gradually decreased over the years. In this way, collectiveness is a crucial, shared norm in the area, experienced on a daily basis.

Conflicts can still arise in the context of collectiveness. Indeed, conflicts over collective rights have occurred frequently between communities or even within a community. According to a historical document, in 1790 one man and his family moved from one community to another. Thereafter, the man and the former community fought over his right to the reeds. Because the present, huge reed bed did not exist at that time, the reeds mentioned in this document here must have been the ones scattered around the rice paddies. The man insisted that he still had a right to the reeds because he was originally from that community; the community argued that he had relinquished his right by moving away (Kitakami Choshi Hensan Iinkai 2005a: 289–191, 2005b: 134–136). We have no document indicating the verdict, but this story shows that the relationship between rights and membership was strongly recognized. Even in 1790, the community perceived the right to the reeds as collective.

During the early years of reed utilization after the river improvement, each community harvested the reeds in a collective way. A resident born in 1934 explained in our interview, “Reeds that are harvested by community work must be divided carefully into heaps. It [the distribution of reed] should be fair. During community harvesting work, each household must provide labor. A high value is placed on fairness.” Interestingly enough, he himself had never experienced this kind of community-wide work to collect reeds, because it ended before he became an adult. However, he retains this historical memory and maintains the norm of collectiveness.

Collectiveness persists in the management of other natural resources as well. Half of the communities in the area are located along the sea and continue to conduct fishing and aquaculture. Seashore seaweed is one of the important marine products. It used to be economically valuable, although its value is now low. Harvesting of seashore seaweed has taken place under strict rules adopted by each community, which has the right to collect the resource in its seashore territory. As a typical example, one hamlet’s *Keiyakuko* sets the days for harvesting. On the first day, each household must provide a member as the collective harvesting crew. The revenue from the first two days of harvesting goes to the community. After the second day, each household can harvest individually.

This history of collectiveness causes people to think that the right to the reeds must belong to the community, not to individuals, even though the land once belonged to individual households.

2.3.3 Subsistence Needs

Subsistence needs also support the legitimacy of this collective right. Shortly after the reed bed appeared, in 1941, the communities jointly formed a reed production association and promptly petitioned the government for permission to collect the reeds. In the petition (Fig. 2.7), they wrote:

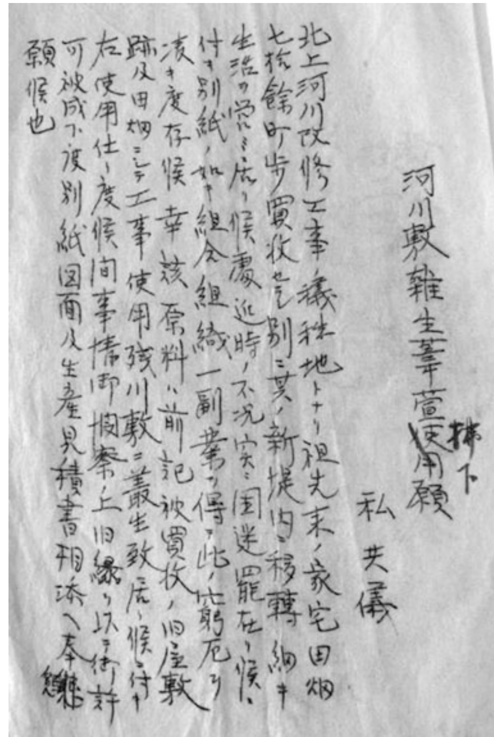
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Fig. 2.7 Petition to the government for permission to collect reeds (c. 1941)

> We were victims of river improvement work. We were forced to sell our ancestral homes and rice paddies and were resettled. We live a meager life, and it is now very difficult due to the recent recession. Therefore, we have formed an association to cope with these difficulties. Fortunately, reeds grew where our former houses and paddies were located, so we would like to ask for permission to use them in consideration of our poor situation. (Kitakami Choshi Hensan Iinkai 2005a: 518)

The statement “We live a meager life” shows that the residents based the legitimacy of their claim on their need to have the reeds for their own subsistence. They insisted again on their “poor situation” in the last sentence of the petition, reinforcing the logic of subsistence.

But the petition cites the two previously mentioned factors as well: historical collectiveness and the memory of the rice paddies. The residents exhibited a sense of historical collectiveness by referring to their newly formed association, noting that their demand was grounded not on individual needs but on collective needs, which must have been socially recognized. They also referred to their memory of the rice paddies, noting that the reeds had grown “where our former houses and paddies were located.” In effect, their (successful) appeal for legitimacy incorporated all three claims.

2.3.4 Profitability

Local businessmen became involved in the reed business in the 1950s, adding a fourth factor, profitability, to the construction of legitimacy. Businessmen engaged in the reed trade had to pay royalties to the communities. *Keiyakukos* always used these profits for community benefit (e.g., to build and maintain shrines and community halls), not for individual interests. In this way, the profits directly supported community well-being. Also, these business activities have created jobs. Because the locals stopped using reeds for their own roofs in the 1950s, local business activities harvesting and marketing the reeds became an excellent substitute, achieving financial profit and sharing it with the community. This financial benefit added legitimacy to the collective right.

2.3.5 Conservation Value

In the 1990s, a new trend started when a young man created a local company. This man had reevaluated the importance of local resources based upon his experience as a volunteer in the Philippines. Because his father was a local reed tradesman, he took over this business and further developed it. He started an integrated business using the reeds, not only harvesting and selling them but also engaging in construction and consulting. His business has twin purposes: earning a profit and reed conservation.

The new business not only created jobs but also encouraged a fresh look at the reeds and their importance. The government and the media began to praise the reed landscape and the local use of reeds, mainly in light of their conservation value. Thus, this new reed business has become a major presence in local society. The legitimacy of this private company's involvement stems from its social creativity and from its conservation value. The communities have granted the company permission to function; in exchange, the company recognizes and respects the communities' rights. In this way, new reasons for legitimacy have been linked to the historical factor of collectiveness.

2.3.6 Disaster and Its Aftermath

The Kitakami area was heavily affected by the 2011 earthquake and tsunami. Seven percent of the population died. Rebuilding began almost immediately thereafter. Industry, housing, use of natural resources (especially fishing), and everyday life have almost returned to normal, although the area suffered substantial depopulation.

In the process of community rebuilding, community cohesiveness has been prominent. The participatory process in Kitakami's housing relocation projects has been highly acclaimed. It was successful because the residents were already accustomed to collective governance procedures from their long experience in shared natural resource management (Nishikido et al. 2016).

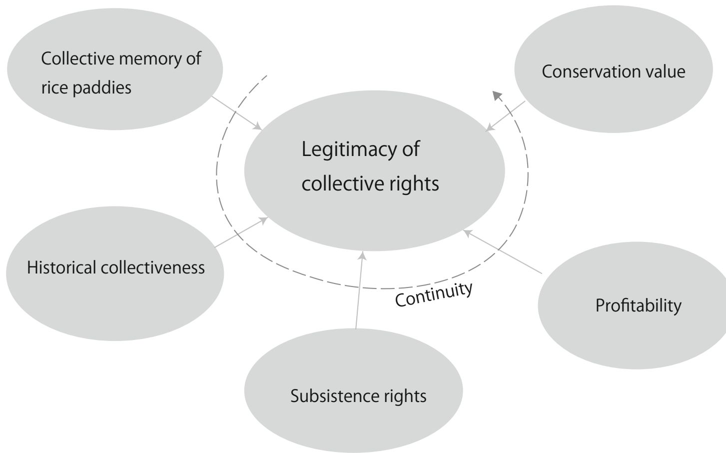

Fig. 2.8 Factors contributing to the legitimacy of collective rights

The reed area was also affected because of the subsidence of the riverbed. The total area containing reeds has shrunk. However, reed management and harvesting have recovered.

2.4 Discussion

The reed bed appeared in the Kitakami River mouth area in the 1930s because of a huge river improvement project. The area had been owned by the residents and was purchased by the government. Conflicts between hamlets arose as a result of the reeds' economic value, but the communities reached an agreement to set up borderlines and give each community the right to collect reeds in its own defined territory. Since then, this right to the natural resources growing in the state-owned river area has been socially recognized. At present, the reed landscape is highly praised not only for its biodiversity but also for its sustainable management. Scientists have stressed the importance of such reed beds for preserving biodiversity and bird habitats (Fujiwara et al. 1995; Nishiura and Yamagishi 1999; Pascal 1999; Hattori and Mae 2001; Fujii 2001).

Co-management by local people and the business sector has sustained this reed landscape. The legitimacy of this collective right has been constructed and maintained on the basis of several factors, as summarized in Fig. 2.8: collective memory of rice paddies, historical collectiveness, subsistence rights, profitability, and conservation value. These factors have accumulated over time, with new justifications being added to previous ones. There has been little contradiction between them, as the communities have managed the integration of the various legitimations.

Generally, governance in conservation is now considered to have a standard formula, relying on bottom-up participation and scientific evidence. However, this formula often does not function effectively in complicated real-life situations. Many intricate problems arise, such as who should be included, which values should be prioritized, and uncertainty regarding scientific data. This case study in Kitakami offers some implications for dealing with such problems in environmental governance.

First, legitimacy is the key to environmental governance. Legitimacy of rights, values, norms, precedent, and institutions matters in the real-life negotiation of environmental practices (Fukunaga 2013). Importantly, legitimacy is dynamic, not static. In view of this dynamism, adaptive governance that can adjust to changes in legitimacy is essential (Folke et al. 2005; Miyauchi 2013, 2018). Kitakami River communities have exhibited this adaptability, altering their system of utilizing the reeds in accordance with social and economic changes.

Second, in such a dynamism, multiple legitimacies should be accumulated successively, in such a way as not to contradict each other. The local history of nature and communities and the incorporation of local values and institutions are crucial to successful environmental governance.

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