

Prototype design guidelines for ‘collaborative governance’ of natural resources

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ABSTRACT

Current forest management in Japan and tropical and sub-tropical Asian countries requires collaboration between the local people and outsiders affected by globalisation. When designing the governance of local commons under such circumstances, there are three possible strategies by which local people may respond to external influences. The first is ‘resistance strategy,’ in which people do not adapt to globalisation and mostly refuse involvement by outsiders in order to preserve their autonomy. The second is ‘adjustment strategy’ meant to assimilate the benefits of globalisation. The third is ‘eclectic strategy,’ which is a compromise that incorporates a partial resistance strategy and limited adjustment strategy. This third strategy presents an advantage in reconciling contradictory concepts such as ‘closure/openness’ and ‘inherent values/universal values’. Under this strategy, ‘collaborative governance’ (*kyouchi* in Japanese) of natural resources could be achieved. This type of governance is organised through collaboration among various stakeholders who have a range of interests in local resource use and management. In the field, however, the opinions of people residing in forest regions, usually minorities with less political power, might not be ultimately reflected in governance, even though equal participation by all stakeholders is formally ensured. In order to overcome such issues, this study offers prototype design guidelines for collaborative governance. These guidelines are derived from and evolved out of the design principles for CPRs, and enable conditions for sustainability of the commons, where researchers have pointed out the importance of linkage with outside organisations and nested enterprises. In particular, this paper proposes three vital guidelines to bring about collaborative governance of the forests: ‘graduated membership’ and ‘commitment principle’, which are underpinned by ‘trust building’.

Keywords: *collaborative governance; design guidelines; graduated membership; commitment principle; trust building; CPR*

INTRODUCTION

Common-pool resources (CPRs), such as forests, wild animals, rivers, coastal zones, and the oceans, are characterised by low excludability and high subtractability. Thus it is difficult to apply management institutions to private goods, which are characterised by high excludability and high subtractability, and to public goods, which are characterised by low excludability and low subtractability. This feature of CPRs has inspired social scientists to assess the options to tackle the issue.

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One of the influential achievements to inspire a series of debates was the eight key 'design principles' (Ostrom, 1990), which were related to the long-term robustness of institutions crafted to govern common-pool resource systems (Ostrom, 2009). Agrawal (2002) combined the three landmark studies of Ostrom (1990), Wade (1988), and Baland and Platteau (1996)¹, to identify 'critical enabling conditions for sustainability on the commons'. The conditions, which comprise 33 factors, are organised into the four major categories of resource system characteristics, group characteristics, institutional arrangements, and external environment, which seem to be a relatively comprehensive list of factors that potentially affect CPR management (Agrawal, 2002).

Though Agrawal's list of factors is definitely useful for the study of CPR management, it is noticeable that the list is a mixture of factors affecting the emergence and formation of new institutions, and the factors bringing about the robustness of existing and newly developed institutions. One is reminded of the following statement by Ostrom (2009):

'(T)hey are causal variables of a process. The design principles, on the other hand, are an effort to understand why the results of this process are robust in some cases and fail in others'.

However that may be, it is not easy to make a clear-cut distinction between the factors for devising new institutions and those which bring robustness to existing institutions². This argument is therefore omitted here. Instead, I will focus on the importance of relations with external stakeholders. 'Nested enterprises,' in which the relationship of the local commons with a wider unit is encouraged, are said to be one of the eight design principles (Ostrom, 1990; Ostrom, 2005). Other scholars (Berkes, 2002; Stern et al., 2002; Agrawal, 2002) also point out the significance of interlinkage between institutions and the external environment in the face of economic globalisation and political democratisation. Further elaboration, however, has yet to be done.

By using forests as a typical CPR, this study will show the rationale for focusing on relations with external stakeholders by summarising experiences in Japan and tropical and sub-tropical Asian countries, and propose design guidelines to devise collaborative governance with external stakeholders.

SIGNIFICANCE OF COLLABORATION WITH EXTERNAL STAKEHOLDERS

Collective forest management systems in Japan and other Asian countries have their own historical, economic, social, and political backgrounds. Though it is not so easy to bridge them and discuss them integrally, I seek possibilities for bridging the systems of Japan and other Asian countries by focusing on the fact that collaboration among concerned stakeholders is indispensable to sustainable forest use and management.

¹ Similarly, McKean (1999) identified 10 attributes of successful common property regimes, and Stern et al. (2002) clarified seven challenges of institutional design.

² Gautam and Shivakoti (2005) indicated that Ostrom's design principles are useful for analyzing the institutional robustness of local forest governance systems.

Communal (*Iriai*) forest management in Japan

Village communities (*Sonraku-kyodotai*) in Japan are defined as communal entities formed on the basis of common land and irrigation that are indispensable to sustainable agricultural production by small farmers (Mita et al., 1996). Basically a village community has an 'ethical dualism' feature (Shiobara et al., 1991), that is, closure to the outside and equality on the inside. Closure to the outside arises from the need to protect common land as the physical basis of the community. Under this principle, beneficiaries of common land are limited to villagers. Meanwhile, equality or fairness on the inside arises from the need for all members to be able to reproduce themselves. Under this principle, the same amount of labor from each household is requested for community service to maintain farm roads and waterways, each household bears the same cost for communal administration, and each household has equal access to common land and irrigation. Although access to irrigation is limited to landed farmers, and although equal cost for common purposes is often regressive and unfavourable to the poor, 'ethical dualism' can be considered a general feature of Japan's village communities.

Geographically Japan's rural villages consisted of a domicile (*mura*), farmland (*nora*), and woods (*yama*) on which villagers depended for their livelihood and were called *satoyama* (Mitsui, 2005). Other natural forests beyond *satoyama* areas were called *okuyama*, which were managed by feudal domains (*han*) and the shogunate (*Bakuhu*) in the Edo period (1603-1868), and by the central government after the Meiji Restoration (1868-1877). Generally *satoyama* were managed collectively by the villagers, which were defined as *iriai* (communal) forests. More than half of *iriai* forests were not forested but actually meadows from the end of Edo to the beginning of Meiji period. It is an important fact that *iriai* forest utilisation had sustained agricultural production. For example, young grass, sprouts/shoots of trees, and twigs, called *karishiki*, were scattered as green manure into the paddy fields before rice planting in spring. Grasses were utilised for compost and manure in summer. Moreover, meadows in *iriai* forests were used for roof thatching, and as pastures for livestock. Trees were used as fuelwood, applying a coppice system with a 20-year rotation. Edible wild plants, nuts, mushrooms, and medicinal herbs supported the livelihoods of the villagers.

Iriai rights (*iriai-ken*)³ are defined as the rights of local people to use and manage the *iriai* forests collectively (Nakao, 1984). In accordance with the Civil Code of 1896, *iriai* rights are categorised into two types. First, the group of *iriai* right holders has exclusive ownership of the forestland, as stipulated in article 263 of the Code. Second, the group has collective usufruct over *iriai* forest that stands on the land owned by other individuals or entities, as stipulated in article 294 of the Code.

³ Specific features of *iriai* rights are summarized as follows (Nakao, 1984): (1) *iriai* rights shall follow the custom in each locality (*iriai* rights and forest-use patterns vary from place to place); (2) *iriai* rights shall be granted to the residents living in a certain hamlet (a household loses its *iriai* rights when it moves out of the locality); (3) *iriai* rights shall not be granted to individuals but to households; (4) *iriai* rights shall not be inherited; (5) *iriai* rights shall not be transferred to others; (6) *iriai* rights shall not be registered (land ownership of *iriai* forests can be registered legally); (7) *iriai* rights shall be effective as long as collective forest management is continued.

There are four types of *iriai* forest-use patterns (Kawashima 1983; McKean 1992): (1) classical collective use⁴, in which right-holders as individuals can enter any part of the *iriai* forest to collect forest products in accordance with their own rules; (2) corporate use, in which right-holders collectively harvest *iriai* forest products to generate income for common use while prohibiting access by individuals; (3) individual use, in which right-holders as individuals use segmented parts of the *iriai* forest (*wariyama*) but cannot sell their land; (4) contract use, in which all right-holders retain collective ownership and can lease *iriai* forest to another parties for harvesting timber or other benefits.

It is important to understand that *iriai* rights comprise the rights of management, control, and disposal held by an *iriai* group or a corporation, and the usufruct is held by individual members of the group (Nakao, 1984). Even the *iriai* membership was decided in accordance with the custom of the village; non-farmers, collateral families, and new settlers usually do not have *iriai* rights. This means that only feudal landed farmers have *iriai* rights. Finally, even *iriai* right-holders would lose their right when moving out of the village.

While the *de facto* privatisation of *iriai* forests started in Edo period, the government has been trying to modernise *iriai* forest ownership since the beginning of the Meiji period in 1868. The modernisation of *iriai* forest ownership⁵ refers to government attempts to identify the legal owners of *iriai* forests with national, municipal, and private ownership in order to invalidate *iriai* rights. Here private ownership is, for example, individuals, group of individuals, and organisations.

Regardless of the formal type of registered forestland ownership, most *de facto* and former *iriai* forests in Japan have been subject to not only the impacts of policy pressure, but also economic difficulties (Inoue, 2001). These are: (1) Severing the relationship between forests and farmland because farmers began to buy fertilisers such as soybean cake before the Second World War; (2) a sharp decrease in demand for fuelwood due to the energy revolution, or use of fossil fuels after the Second World War; (3) a rapid increase in timber imports due to cheaper prices since the 1950s; and (4) longtime low-priced domestic timber since the 1950s. These economic conditions have long depressed the forestry sector. Meanwhile, owners of natural forests give up managing them because they cannot create new demand for fuelwood and pulp. Owners of plantation forests cannot sell their planted and tended stands of trees such as Japanese cedar due to unprofitability, while the amount of plantation forest ironically keeps increasing and seems enriched at first sight.

⁴ Especially for the patterns of classical collective use, specific regulations were effective in villages. In certain cases when somebody violates the rule, that person is fined or temporarily banned from the *iriai* forest. On certain occasions, however, no sanction is enacted. Examples of the rule are: (1) Regulation of time periods: The date of when mowing starts, called *yama-no-kuchiake*, was clearly determined. For example, cutting and collecting *karishiki* was generally started just before rice planting. (2) Regulation in terms of use: Usually log cutting was prohibited. (3) Regulation in terms of volume: The amount of grass cut by a person is limited to the amount that could be shouldered at one time. (4) Regulation in terms of the number of people: Only one person from a household was permitted to enter to the *iriai* forest at a time. (5) Regulation in terms of tools: Only sickles for mowing and hatchets for felling logs were permitted. (6) Regulation in terms of purpose: People were permitted to fell logs only for their own use.

⁵ Yamashita et al. (2009) describe the details of the process.

Since the mid-1980s, city dwellers started visiting rural areas to help manage forests as 'forest volunteers' (Mitsui, 2005) for their own recreation and for social justice in terms of environmental conservation. The number of 'forest volunteers' later increased, and some of them acquired technical knowledge and skills in forestry. The government cannot avoid positioning forest management by civil society in national and local forestry policy. The role of the civil sector (including local people and the general public) in the sustainable management of forests is emerging and quite important in both the private and public sector. *De facto* and former *iriai* forest owners and outsiders are seeking collaboration to manage forests even though their livelihood does not depend on the forest anymore.

Participatory forest management in tropical and sub-tropical Asia

Leading programs for participatory and decentralised forest management (Balooni and Inoue, 2007) are (1) Community Forestry in Nepal, where authority for forest management is transferred to local people or forest user groups; (2) Joint Forest Management in India (Balooni and Inoue, 2009), where local people or village forest protection and management committees (VFPMCs) collaborate with the government or Forest Department, which retains management authority; and (3) Community-based Forest Management (CBFM) in the Philippines (Pulhin et al., 2007; Balooni et al., 2008), where the government issue tenure instruments to organized local communities that provide the latter the legal basis to manage and benefit from the forest resources (Pulhin and Inoue, 2008). Other countries have also tried the following programs: Social Forestry, Individual Forestry, and management of Customary Forests in Indonesia (Inoue, 2003a); management of private woodlots, Farm Forestry, and Social Forestry in Sri Lanka (DeZoysa and Inoue, 2008); Social Forestry, Community Forestry, woodlot plantations, and agroforestry in Bangladesh (Nath and Inoue, 2009); Village Forestry and forest management on formally allocated village territory in Laos; and Community Forestry in Cambodia.

These programs have been introduced since the 1990s in line with the promotion of decentralisation in which local governments were given greater responsibilities for forest management. As observed by Institute for Global Environmental Strategies (IGES, 2007), the impacts of decentralisation have been limited by: unstable and unpredictable policies; the desire of higher-level forest administrators to retain the status quo that sustains their influence; a lack of confidence amongst foresters in the ability of local communities to manage forests; and manipulation of the decentralisation process by local elites for their own advantage. Decentralisation can also stimulate conflicts between competing interest groups because more local stakeholders have opportunities to benefit than before, such as conflicts over boundaries between villages (Imang et al, 2009) and elite capture (Balooni et al, 2010).

Despite the shortcomings of the current policies mentioned above, decentralisation has provided opportunities for governments to more effectively support participatory forest management, and may create opportunities for new alliances to promote rural development and forest management (IGES, 2007). Meanwhile, not all local people have developed appropriate local resource management systems based on traditional local knowledge; many people need support, in terms of skills for forest

management, appropriate budgets, and formation and intensification of social capital, by reliable outsiders such as NGOs, local governments, and scientists.

THREE STRATEGIES FOR SUSTAINABLE FOREST USE AND MANAGEMENT

These experiences indicate that collaboration among concerned stakeholders is indispensable to sustainable forest use and management in Japan and in tropical and sub-tropical Asian countries in the era of globalisation in which economic and social activities are taken across the national border. In terms of the 'spatial/geographical scale' of collaboration, 'focal actors/stakeholders', and 'attitude of local people', three strategies can be developed.

The first is 'resistance strategy' or localisation strategy, in which people do not want to adapt to globalisation and mostly refuse involvement by outsiders in order to preserve their autonomy. This strategy emphasises reconstructing local systems characterised by autonomy and reciprocity. Use and management of local resources and environment might be embedded into the livelihoods of local people. The expected focal actor of local forest governance is the village community, which is characterised by exclusive membership. This strategy accords with neither 'liberalism' nor 'social democracy', and might be promoted under 'conservative' politics.

The second is 'adjustment strategy' or globalisation strategy, in which they are eager to assimilate the benefits of globalisation. This strategy intends to design open systems characterised by publicness. Local resources and the environment might be valued as broader social welfare, being separated from the context of the local people's livelihood. The expected focal actor of local forest governance is associations such as NGOs and NPOs that are formed in civil society, whose viewpoint conflicts inherently with that of local people. This strategy accords with neither 'liberalism' nor 'conservatism', and might be promoted under 'social democratic' politics.

The third is 'eclectic strategy' or glocalisation strategy, which compromises both strategies, in which closure and openness as well as inherent values and universal values are adjusted, and which is endowed with partial resistance strategy and limited adjustment strategy. Under this strategy, 'collaborative governance' (*kyouchi* in Japanese) of natural resources might be achieved. This type of governance is organised through collaboration among various stakeholders who have a range of interests in local forest use and management (Inoue, 2004).

In the field, however, neither easy co-ordination nor happy consensus for every stakeholder can be accomplished. Even though most of us may say that equal participation by all stakeholders should be ensured, the voices of the people residing in forest regions, usually minorities with less political power, might not be ultimately reflected in government policies. Such typical examples can be seen in the establishment and management of national parks and other protected areas in the tropics.

Moreover, the sphere of collaborative governance is not identical to the administrative area and scale. It may be formed within a local community, beyond communities and local government, or even beyond the nation. The sphere of collaborative governance,

or *kyouchi*, looks like a *mandala* of Buddhism and Hinduism⁶, in which many spheres overlap with some parts.

PROTOTYPE DESIGN GUIDELINES

In order to tackle the barriers to facilitating the 'eclectic strategy' or glocalisation strategy, I proposed prototype design guidelines for collaborative governance of forests (Inoue, 2009)⁷. Those guidelines, or *kyouchi* principles, were derived from and evolved out of the design principles for CPRs (Ostrom 1990; McKean 1999; Stern et al. 2002; Ostrom 2005), in which the importance of linkage with outside organisations and nested enterprises was pointed out but not further developed.

Here I would like to further elaborate three vital design guidelines: 'graduated membership' and 'commitment principle', assured by 'trust building', which have the potential to make an original contribution to enriching the conditions for 'group characteristics', 'institutional arrangements', and 'external environment', respectively, that were categorised by Agrawal (2002).

Graduated membership of executive management body

Collaborative governance, in which local people and outsiders successfully build a consensus, cannot be established if local people stick solely to their cultural traditions completely exclusive of outsiders. Thus 'open-minded localism' is required, in which local people consent to open their resources and environment to outsiders. This principle agrees well with the principle of subsidiarity, whereby the larger-scale political and administrative unit only supplements the smaller-scale unit or basic autonomous unit.

Based on 'open-minded localism', some of the local people act as core members (first-class members), who have the strongest authority and co-operate with other graduated members (second- and third-class members), who have relatively weaker authority. Having a clear and graduated membership boundaries implies exclusion of non-members. As such, executive bodies should deal with the exclusion issue to ensure fairness and to acquire legitimacy from relevant stakeholders.

In line with the notion that participation by all of local people is neither possible nor favourable (Edmonds and Wollenberg, 2001), we can propose something like a forest management committee, in which representatives of the local people form a core of (first-class) members; local government administration, NGOs, and academics/scientists make commitments as second-class members, and others support activities as third-class members. The second- and third-class members should be provided definite legitimacy by core members.

Commitment principle for decision-making

⁶ *Mandala* is a figure representing the universe in which many circles of the Buddha are situated.

⁷ Inoue (2009) proposed nine design guidelines: Design guideline 1 (degree of local autonomy), design guideline 2 (clearly defined resource boundary), design guideline 3 (graduated membership), design guideline 4 (commitment principle), design guideline 5 (fair benefit distribution), design guideline 6 (two-storied monitoring system), design guideline 7 (two-storied sanctions), design guideline 8 (nested conflict management mechanism), design guideline 9 (trust building).

To avoid the deterioration of local autonomy, it is essential for all stakeholders to consent to the 'principle of involvement' (Inoue, 2003b), which recognises the rights of stakeholders to speak in a capacity that corresponds to their degree of involvement in forest use and management. While the 'principle of involvement' was a concept to embrace the authority to speak out with a voice in the forum, the 'commitment principle' (Inoue, 2009) refers clearly to the authority to make decisions in the arena. Here we define the 'commitment principle' as a principle for decision-making in which the authority of stakeholders is recognised to an extent that corresponds to their degree of commitment to relevant activities.

Under this principle, local people who often enter and care for the forest might be expected to have greater power over the decision-making process; outsiders who say a lot without doing much might be provided less power; and the conscientious outsiders who devote their time or money to local forest management might be given more power. In this way, various stakeholders are able to agree on the legitimacy of the opinions of outsiders as well as those of local people.

Decision-making is not done on an equal basis or with one-person, one-vote ballots, but should be regarded as fair, equitable, and just by the stakeholders. Whether the decision is admitted as fair depends on whether the decision-making process is considered legitimate. It is vital for all members involved in the process to reach a consensus on what extent they should grant legitimacy to what statement made by whom. Having done so, the scale of the arena or the numbers of members for decision-making should be limited appropriately, because all members should recognise the approximate degree of commitment each other. A small-scale arena is an ideal trial base for the commitment principle. Even though stakeholders are spread out over broader geographical areas, a small-scale arena can be organised under the guidelines of 'graduated membership'. When we cannot avoid organising a larger arena, we must find indicators to evaluate the degree of commitment, such as the contribution of labor and funding by individual members, and admit the weighted right to vote, even though it is not an easy task.

Trust-building with outsiders

Collaborative governance, or *kyouchi*, cannot function well unless social capital with outsiders is formed, maintained, and strengthened. Though there are a variety of definitions (Coleman, 1990; Putnam, 1993; Fukuyama, 1995), 'trust' is definitely one of the important factors of social capital. Here the distinction between 'assurance' and 'trust' given by social psychologists (Yamagishi, 1998) is noteworthy. While 'assurance' is when I reason that you has no motive to take action that would exploit me, and that there is no social uncertainty between you and me, 'trust' is my expectation of your intention. When 'assurance' is not provided or social uncertainty is high, 'trust' is vital for me. On the contrary, 'trust' is useless when I have no or little possibility of being cheated by you and others.

Local people might strengthen collaboration among villagers based on 'assurance' under the 'resistance strategy' or localisation strategy. On the other hand, they have to provide for collaboration with heterogeneous outsiders based on 'trust' under the 'eclectic strategy' or glocalisation strategy, as well as the 'adjustment strategy' or

globalisation strategy. Trust-building with outsiders is a precondition for ‘graduated membership’ and the ‘commitment principle’, though it is difficult to identify the conditions for trust-building.

CONCLUSIONS

In accordance with the need for collaboration between local people and outsiders on forest use and management in Japan and other Asian countries, we proposed three design guidelines for the collaborative governance of natural resources: ‘Graduated membership’ of executive management bodies can make an original contribution to enriching the conditions for ‘group characteristics’, as can the ‘commitment principle’ of decision-making for ‘institutional arrangements’, and ‘trust building’ with outsiders for the ‘external environment’.

Players in the system of collaborative governance are assumed to be only those who are interested in specific issues such as environmental conservation, without considering the livelihoods of local people. Their interest in the issues often does not persist for long because of their fickle nature. Hence the existence of reliable core members is indispensable for continuous activities.

If community members and their activities fail to gain the approval of the majority of society, or if they cannot acquire legitimacy in the larger society, collaborative governance will not mature into a robust system. Getting the approval of the larger society is connected to the concept of ‘deliberative democracy’. Deliberative democracy, often called ‘discursive democracy’, is a system of political decisions that relies on citizen deliberation to formulate sound policies (Yamaguchi, 2004). In deliberative democracy, legitimate law making can arise only through public deliberation by the people. This notion seems to have a close connection with the concept of collaborative governance, or *kyouchi*, described in this paper.

The ‘commitment principle’, however, seems to contradict the principle of deliberative democracy (Cohen, 1997). The participants should all have an equal say in a deliberative democracy. This principle is important in order for the participants to speak out freely regardless of their social status, and to be bound only by the results of deliberation. However, we introduced the commitment principle to avoid the influence of social status, because otherwise it seems impossible for the participants to speak out freely regardless of their social status in the real world.

Required as the next step is a theoretical and empirical investigation to demonstrate the validity of our proposal.

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