Equity for Women and Marginalized Groups in Patriarchal Societies during Forest Landscape Restoration: The Controlling Influence of Tradition and Culture

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Summary

We explore the difficulty of achieving equity for women in two forest and livelihood restoration (FLR) pilot projects, one each in Papua New Guinea (PNG) and the Philippines. We use institutional bricolage as a framework to explain the context and background of stakeholders' decision-making and the consequent impact on equity and benefit distribution. In the Philippines, material and institutional support was initially successful in assisting participants to establish small-scale tree plantations. A structured approach to institutional development has successfully evolved to meet the needs of women, even though corruption has re-emerged as a destabilizing influence. In PNG, despite success in establishing trees and crops, the participation of women was subjugated to traditional customs and norms that precluded them from engaging in land management decisions. The capacity-building and gender-equity principles of FLR consequently became compromised. We conclude that in some patriarchal societies achieving equity for women will be difficult and progress will be contingent on a detailed understanding of the effects of traditional customs and norms on participation and decision-making.

Introduction

In developing countries, community forestry is one of the building blocks of forest and livelihood restoration (FLR). If the ambitious targets of the Bonn Challenge (restoration of 150 million ha of the world's deforested and degraded land by 2020 and 350 million ha by 2030) and the New York Declaration on Forests (a voluntary partnership between governments, business, civil society and indigenous people to halve deforestation by 2020 and end it by 2030) are to be achieved, then the FLR principle of wide stakeholder engagement directly aligns with community-led forest establishment, management or restoration. Hence, community-based tree planting, such as the National Greening Program of the Philippines aims to restore the productivity of deforested land on a national basis (Department of Environment and Natural Resources 2018) and government policy in Papua New Guinea (PNG) is to promote tree planting (Papua New Guinea 2011).

Community forestry has proven successful at promoting sustainable landscapes, improving livelihoods and reducing the pressure on remaining native forest (Gilmore 2016, Pelletier et al. 2016). However, success is dependent on accommodating the biophysical, economic and socio-cultural factors (Maryudi et al. 2012, Le et al. 2014) that affect the institutional development necessary for effective intracommunity governance. Governance can successfully evolve provided participants are willing to negotiate outcomes (Poteete & Ostrom 2004, Wangel & Blomkvist 2013, Ostrom 2014).

The term *bricolage* traditionally refers to the process of constructing or creating something from a diverse range of available things. People develop new institutions using an institutional form of bricolage; they use their experience, social circumstances, norms and resources as the basis of new institutions or actions (Cleaver & de Koning 2015). The institutional bricolage of seemingly participatory institutional development in parts of south Asia, Nepal and sub-Saharan Africa has resulted in the exclusion of women, often through the elite capture of benefits (Agarwal 2001, Shrestha & Shrestha 2017, Benjamin et al. 2018, respectively). Decision-making is also often controlled by men, even though women depend on forest products for their immediate livelihood needs (e.g., see Kobbail 2012 in Sudan; Yadev et al. 2015 in Nepal; Vázquez-García & Ortega-Ortega 2017 in Mexico). This situation is potentially at odds with the FLR principles that restoration should occur with the participation of all stakeholders and foster livelihood development (e.g., through training or capacity building; Sayer et al. 2013, Appanah 2016, Erbaugh & Oldekop 2018).

The literature provides examples of how socioeconomic factors, including traditional customs and land tenure, may affect women's participation. In the Democratic Republic of the Congo, tree planting reduced the availability of land for poor women because these women often rented land for subsistence agriculture, whereas men also engaged in animal husbandry (Pelletier et al. 2018). In Nepal, the success of a pro-poor affirmative action policy was compromised because some women were shamed by being classified as disadvantaged (Saito-Jensen et al. 2014). There is little detail in the FLR literature regarding how to deal with the factors that inhibit women's participation (Sabogal et al. 2015). Hence, we suggest that identifying these factors, particularly the traditional customs and norms that are unknown to outsiders, is critical to the biophysical success of community FLR.

This research was undertaken in order to compare equity in decision-making for the stakeholders – specifically women – in two community forestry-based FLR pilot projects, one each in PNG and the Philippines. The purpose of these projects was to investigate farmers' adoption of agroforestry through whether extension assistance could make agroforestry both feasible in terms of farmers' skills and socio-cultural factors and acceptable in terms of the benefits (Franzel et al. 2002).

PNG culture offers contrasts to the Philippines in two factors that are central to community forestry and, through it, FLR: clan conflict, which is often associated with property rights, and gender inequality (see Le et al. 2014, Baynes et al. 2016). In the Philippines, women rank equally with men in relation to land inheritance, whereas in PNG, land inheritance follows either a patrilineal or matrilineal line of descent. In patrilineal clans, men own the land and make all of the decisions regarding its allocation to families. Even in matrilineal clans, men typically manage family financial affairs, and successful women can become targets of resentment from their peers, husbands and other relatives (Eves 2016). Hence, the Philippines and PNG offered an opportunity to compare and contrast women's participation and rights in the two projects.

In this paper, we review the effects of our material, technical and institutional support on achieving equity for women in FLR. We use the concept of institutional bricolage to explain the decision-making and actions of stakeholders, particularly women. We present the results of the two pilot projects and consider the findings and recommendations that might be applied to community forestry and FLR in comparable contexts.

Methods

Institutional Bricolage Framework

Ex ante, the design of both pilot projects was predicated on imperfect knowledge of how the communities would react to intervention in their affairs. For our planning, we could not treat communities as being homogenous and possessing shared understandings and identities (Agrawal & Gibson 1999). We were also mindful that interventions can change from a structured approach (institutional design) to encouraging actors to redesign and adapt institutions (crafting; e.g., Barnes & van Laerhoven 2015). However, we also had little information about the 'pragmatic agency', or the ability of actors to innovate when routine institutions and norms prove inadequate (Hitlin 2007). Because the projects involved injection of financial and human resources into the communities, negotiations were necessarily complex, and in the case of the Philippines, they lasted almost a year. In both countries, we adopted a hybrid approach to institutional development that was structured in terms of community organizing, budgets and timeframes, but crafted in terms of encouraging both communities to manage their affairs.

The social outcomes of both projects suggested that, for our review, we needed a theoretical framework with explanatory power. We had observed that some actors had more agency than others and that several outcomes were influenced by traditional customs. Consequently, we adopted the concept of 'institutional bricolage', as described by Cleaver (2002), as a framework that furthered our understanding of what had eventuated in each of the projects and the implications for further work. In this framework, instead of viewing actors as economically rational, they were conceptualized as deeply embedded in their cultural milieu, even though they are capable of analysing and acting on the circumstances that confront them. In Cleaver's (2002, p. 15) definition, new institutions are constructed by "bricoleurs" (actors) through a process of bricolage (i.e., "gathering and applying analogies of style and thought that are already part of existing institutions"). Different actors are likely to apply their knowledge, power and agency in different ways, and these people may have complex identities (e.g., a man being a farmer and a clan leader) rather than a single identity. Our case study results could therefore be interpreted in these terms.

Extension Activities and Data Collection in PNG and the Philippines

Our prior experience in both the Philippines and PNG was that entrance to communities was only achieved with the support of local government units and elected local leaders, even though these people may play little part thereafter. Hence, in the Philippines community engagement was preceded by meetings with local government officials. Invitations to subsequent meetings were given to the community members as a whole. In PNG, we used our project partner Ramu Agri Industries Ltd (RAIL) as an initial intermediary. Subsequent meetings were held with clan officials and other interested clan members. In both countries, we provided seedling nursery technology and facilitated engagement with external agencies (e.g., seed suppliers) that community members could not access for themselves. We also encouraged communities to plan and schedule activities, manage operational matters and devise their own local ordinances or agreements.

Because social constraints could have restricted the participation of women in PNG, we obtained their perspectives by interviewing men and women separately. We were also gender responsive. For example, because cooking is considered women's responsibility in PNG, we supplied food whenever meetings were held. Also in PNG, when we felt that our primary data were inadequate for explaining women's motivation, we conducted a separate round of interviews with them. In both countries, we maintained communication with office holders and community members by providing a liaison officer to attend meetings, to work directly with the community during fieldwork and to act as a trainer and facilitator. Visual observations and informal conversations consequently became additional sources of information and served to corroborate information exchanged during visits and meetings with government agencies and communities.

Philippines Case Study Background

Biliran Island, where this research was conducted, is typical of rural areas in the Philippines in that most of the flat or fertile land is used for copra, rice or annual crops, almost all native forest having been

cleared for agriculture. Other patches of less fertile land are often covered with perennial grass and subject to shifting cultivation by poor farmers who have no legal title to the land. The population density is high at 302 people per km^2 (Philippine Statistics Authority 2013), and the area of individual farms is often as little as 1 ha or less. Families live as separate economic units and are governed locally by local-level ordinances.

Community forestry operates under the current banner of the 'Community-Based Forest Management' (CBFM) programme and is managed through people's organizations (POs) through the Department of Environment and Natural Resources (DENR). Sustainable management of forest resources is far from being realized, largely due to a failure to address livelihood issues (Gregorio et al. 2015).

Designing and Implementing the Philippines Case

The case study was a farming community in Kaway (Biliran Province). Project researchers found that the Kaway PO had become dysfunctional. Between 2010 and 2013, the PO membership had fallen from 116 to only 3 members. Interviews and meetings with local people and DENR staff in early 2015 revealed that a lack of social preparation had reduced people's willingness to participate in PO activities. Subsequently, PO officials requested assistance from project staff to help them reforest neighbouring government-owned land. Permission from DENR was sought and gained.

In mid-2014, institutional support to reform the PO with new articles of association culminated in a memorandum of understanding (MOU) between the project, the PO and DENR to undertake reforestation of 26 ha of government-owned land. The MOU allowed for PO regulations to be managed internally, with limited oversight (e.g., attendance at meetings) by DENR and project staff. Ancillary support was limited to training for record-keeping, financial management and establishing a community nursery. Initial financial support (*c.* US$60 per ha) was supplied as payments to PO members for their labour. Participation was invited from the entire community, and as of late 2018, the membership was *c.* 30 farming families.

Once the MOU was formalized, nursery construction provided the impetus for follow-up activities, including a survey of the land, zoning the land into tree plantation, agroforestry and protection zones, site preparation, tree planting, vegetable growing in the agroforestry zone and fire protection.

During the preparation phase, the PO leaders declared that a key obstacle to establishing trees was seven people who claimed ownership to parts of the land, even though their claims were not recognized by DENR. If the project had proceeded without including these people, there was a very high likelihood that they would respond by burning any newly planted trees. Accommodating these land claims became the first challenge facing the rejuvenated PO.

PNG Case Study Background

In PNG, the average rainfall is high (3000 mm/year), hence much of the vegetation is (or was) tropical rainforest. The total land area is *c.* 46 million ha, of which *c.* 29 million ha is forested. The case used for this research was undertaken with the Kasi clan, who live adjacent to the township of Ramu in the anthropogenic grasslands of the Ramu-Markham valley (RMV).

The Kasi clan is typical of many villages in PNG in that most people depend on subsistence agriculture for their livelihoods, although some community members are employed by local businesses. The clan owns land that, as recognized in PNG law, is held under customary land tenure. Clan leaders apportion land to men so that they can grow a vegetable garden. Ownership rights to this land may be inherited by these men's sons. Daughters or widows may be granted usufruct but not inheritance rights. However, intra- and inter-clan land ownership disputes are frequent.

Designing and Implementing the PNG Case

Research with the Kasi clan was facilitated by RAIL staff who had been approached by the clan leader to help them to grow timber tree seedlings and establish woodlots. Beginning in May 2016, project staff provided support to the Kasi clan as part of a wider extension project in which communities were provided with basic materials (e.g., a community nursery) and extended technical assistance to grow and out-plant seedlings. In a similar manner to the extension assistance at Kaway, the main steps were preliminary meetings with community leaders and members, followed by delivery of a written request for assistance, signing a MOU between the clan and RAIL and surveying the land (*c.* 3 ha) that was proposed for planting. Because these communities are wary of outsiders and because RAIL staff indicated that there was a danger of raising villagers' expectations, discussions focused on technical assistance to grow and plant out tree seedlings. A detailed social survey or gender analysis was not possible. However, villagers took the lead in scheduling activities and, following nursery construction, the land was brushed, burnt, ploughed and planted with tree seedlings, vegetables and cacao. Monthly visits to the village continued until March 2018.

Because women rarely spoke at meetings, in mid-2017 we conducted a series of interviews with women who lived in and adjacent to Kasi in order to ascertain their attitudes and motivations. We designed semi-structured interviews in order to ascertain how FLR could best be designed to lift the social autonomy of women. The foci of the interviews were women's roles in subsistence gardening, crop preferences, labour requirements and family decision-making. Fourteen interviews were conducted with individuals and three discussions were held with groups. All interviews were conducted by women.

Results

Assistance to the Kaway PO in the Philippines, Role of Women in the PO and PO Institution Building

At Kaway, between 2014 and 2015, a community nursery was established and 26 ha of grassland was planted as either agroforest or production forest under the terms of the MOU. The agroforestry zone was planted with food crops, fruit trees and fast-growing timber species, and by as at early 2018, the PO has harvested cassava, sweet potato and pineapple. The PO nursery has produced over 7000 seedlings and, except for seed collection, all nursery work has been allocated to older PO members and women. Regular PO meetings have been held and community ordinances have been promulgated to help protect plantations from fire and grazing animals.

When the PO was reformed, women were elected to the positions of secretary and treasurer. The power of these women to influence PO affairs was illustrated in mid-2017 when DENR offered the PO a second project to reforest adjacent land. The PO leader attempted to keep the finances of the new project under his personal control. However, the treasurer discussed the new project with other PO members and demanded that new project

funds should be disclosed in PO financial reports. In early 2018, a compromise was reached in which some of the funds have been allocated to PO members (as labour hire) and some funds have been retained by the PO leader for distribution at his discretion. When questioned about this matter, members commented that the treasurer felt emboldened to raise the matter because she had an independent source of income, but that her gender was irrelevant. However, they added that the wives of the adverse claimant farmers would not have been emboldened to raise the matter with officials. These women depend on wages from both nursery and fieldwork. Whenever their husbands obtain more lucrative work, the women become substitute labour for the PO.

The main change to the institutional management of the PO has been a move away from community-based to family-based reforestation. This change was necessary because whenever voluntary labour has been required (e.g., to weed crops in the agroforestry section), only a few people showed enthusiasm for undertaking the activities. As a solution, the PO adopted a resolution in which the agroforestry zone has been divided into parcels of land that are each managed by one family. This approach has proved particularly effective with the seven land claimants because it provided quasi-legal documentation for their usufruct rights to a specific parcel of land.

Assistance to the Kasi Clan in PNG, Role of Women and Emergence of Conflict

In April 2016, after project staff outlined their offer of assistance and extended technical assistance (nursery training) to the general meeting of community members, 16 families decided to join the project. Funding of 400 kina (approximately US$150) was given to the clan leader to plough the land, but as he later explained, he paid youths from a local soccer club 50 kina to clear the land and kept the remaining funds for contingencies. Nursery construction, seedling germination and planting proceeded without incident, and by March 2017, over 1 ha of *Eucalyptus pellita* seedlings had been planted to provide a future timber resource for all 16 participating families. A further hectare had been planted with cacao seedlings and the shade trees that are necessary for their protection. The clan leader explained that the rights to this plantation had been allocated to him and his six sisters. As women, they could not inherit land, but because he had given his permission, the plantation would enable them to acquire usufruct rights, which they could pass on to their male children.

Allocating land to the clan leader's six sisters was interpreted by project staff as a common example of the complications of exogamy and patrilineal land inheritance. Women must marry outside the clan, as required by customary law, but may elect to live in their own village. Because their husbands are not clan members, the family has no land rights. However, clan leaders typically allow these families to use land for a vegetable garden and, in time, the land will be inherited by male children.

In the supplementary interviews, women readily provided a wide range of comments and opinions, with consensus emerging in three main areas. First, the women indicated that at a clan level, decision-making regarding land allocation is controlled by men, and women take no meaningful part in it. When questioned further about the potential usefulness of legal or quasi-legal documented arrangements (a potential quasi-legal institution in these circumstances is a Clan Land Use Agreement) to guarantee land allocation for disadvantaged women, one woman responded: "It will always be men signing the forms. Land allocation is a very

serious area and women can't make those decisions. It's just not in my culture."

The women agreed that vegetable gardens were their domain, but decisions about what and when to plant are often made jointly with husbands. However, family finances are managed by men, and several women indicated that disputes over money are a common cause of domestic violence.

Second, women are very proud of their gardens and their role of providing for their families. Several women quoted a local adage that 'a happy garden makes a happy husband'. However, women almost universally commented that garden maintenance is very onerous. Men's willingness to help with these tasks varied from family to family.

Third, women's responses to questions about decision-making and benefit-sharing revealed a high level of acceptance of the existing social order. For example, a widow indicated that she was very generous with sharing her garden produce with her family because her brothers had allocated her land for a garden. None of the woman indicated a need for social change in regards to land, labour or benefit sharing. Their suggestions for livelihood improvements were limited to technical training, tools, a well and a nursery. Institutional change, which could hypothetically be mediated by an external agency to improve women's social autonomy, was not part of their mental model.

A further and unexpected result of extension assistance arose in July 2017, after the young trees had become established. Project staff were taken to the site and were accosted by a group of clan members who complained that the 400 kina that had been set aside for ploughing the land had been kept by the clan leader, stating that if it was not shared, trouble would follow. In addition, by allowing the six sisters to gain control over the 1 ha of cacao, other clan members had been excluded. Furthermore, because the land had not been ploughed, they were unable to take the opportunity to establish new yam gardens. A clan meeting would be called and, until the matter was resolved, the group asked for all further work to stop. With the best of intentions, project assistance had created or exacerbated intra-clan tensions, and goodwill had dissipated. Project staff commented that, in these situations, the disputed trees are likely to be burnt as an act of retribution.

Discussion

How Institutional Bricolage Affected Gender Equity

In the RMV, patrilineality and traditional gender roles are key influences in the institutional bricolage that impedes gender equity in FLR. The culturally determined inability of women to contribute to land-use decision-making resulted in their exclusion from project activities. Following the typology of participation proposed by Agarwal (2001), their involvement was not even nominal. As indicated by the interviews, these constraints are deeply embedded in PNG culture. Even in matriarchal clans in other parts of Melanesia, decision-making is largely controlled by men (Braun 2013, Monson 2017, Smith 2017). Husbands consequently control family expenditure (Human Rights Watch 2015, Eves 2016). This accords with research in other patriarchal societies, such as Nepal, where legal principles may theoretically apply, but cultural norms are key structural barriers to the social status and independence of women (Rawal & Agrawal 2016).

In PNG, women with a grievance may approach a Village Court, and this practice is increasingly used, for example, to shame an errant husband (Demian 2014). However, these courts do not hear land claims and the Local Land Court is typically concerned

with inter-clan rather than domestic disputes (Allen & Monson 2014). Our example of the generosity of the widow who shared her produce with her brothers and their families also shows how women may depend on the goodwill of their relatives. Re-marriage outside of her husband's clan may introduce further complications, such as the return of an original bride-price or estrangement from her in-laws (Naupa 2017).

In the Philippines, it would be difficult to know whether the women who substituted their labour for that of their husbands did so voluntarily or because they were coerced. If empowerment through employment occurs when people have alternatives from which to choose (Kabeer 2005), then these people may not have been empowered, but were simply acting in an economically rational manner to take any opportunity to increase their income. Compared to PNG, the institutional bricolage of women in the Philippines includes a higher level of gender equity, particularly (as in our case) for those women with the social position to be elected as office bearers. Hence, our evidence is more in accord with research from south Asia (see Agarwal 2001, 2010, Mai et al. 2011) showing that these women have the personal agency to speak up at community meetings in order to protect their livelihoods. The contrast between the assertiveness of the PO secretary at Kaway and the need for family harmony at Kasi could not be more clear.

How Institutional Bricolage Affected Other Actors

The vulnerability of the clan leader to clan conflict emerged as a major component of his institutional bricolage. As social entities, PNG clans are notoriously unstable entities and are characterized by power struggles and conflict (Capie 2011, Baynes et al. 2017) that are so common that Village Courts were set up to prevent them clogging up higher-level courts with minor disputes (see Goddard 2009). Clan leaders may have the power to allocate resources as they wish, but the threat of being deposed is always present, and their decisions are predicated on that threat. In response, disadvantaged clan members often resort to violence or arson. In the Philippines, our evidence suggests that if PO members become dissatisfied with their leader, they may resign from the PO. However, PO members would be aware that DENR and non-governmental organization funding depends on an impression of stable governance and membership. The remaining core of 30 families in the Kaway PO have retained their membership in the context of the PO leader's greed, their fear of missing benefits and possible retribution if they voice their concerns. In this sense, the Kasi clan and the Kaway PO share a common instability.

Implications for Equity in Community Forestry and FLR

For community forestry, entrance to project sites will always be via community leaders. Control of extension activities, including initial institution building, is consequently ceded to them. Hence, in PNG and other societies with tightly controlled decision-making, well-intentioned agroforestry extension may not initially comply with the FLR principles of wide and equitable stakeholder engagement and capacity building. Extending the timeframe for engagement and support may act as an ameliorating influence, particularly with the semi-democratic governance structure operating at Kaway. However, continued oversight is at odds with encouraging the individual and community agency that is widely acknowledged as being necessary for durable change (Cleaver & de Koning 2015, Persson & Prowse 2017).

Fortunately, the enthusiasm of women at Kaway for nursery work provides a blueprint for enhancing their role in FLR. In Melanesia in particular, women need men to champion their advancement, not oppose it (Smith 2017). Our evidence indicates that the less labour-intensive components of FLR that require technical expertise, problem-solving and innovation are windows of opportunity for training in which gender roles and power relationships may begin to become blurred. These activities include seed collection and storage, seedling and cuttings propagation, pest control and early-age silviculture. The livelihood and tree-planting aspects of FLR can become mixed (e.g., trees as shade cover for cacao or coffee). As has been shown at Kaway, women have the enthusiasm to take on livelihood activities provided they can see the benefits. Directing training at families as well as communities may be the key.

Conclusion

These pilot studies indicate that in some patriarchal societies achieving equity for women may be difficult. Overall, our cases show that in patriarchal societies achieving gender equity in FLR is likely to be slow and that improvements to women's social power may be incremental. For project managers, an intimate knowledge of the culture and the institutional bricolage that accompanies decision-making will be crucial to success. For women in particular, our cases suggest that FLR should be less concerned with the area of land restored, and focus more on considerations of feasibility, pragmatic agency and the institutional bricolage that governs what people are able to do.

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