



## Case report

## Public-private partnerships for improved reforestation outcomes in the Philippines

Dominique Cagalan

World Agroforestry Centre (ICRAF), Philippines

## ARTICLE INFO

## Article history:

Received 20 October 2016

Revised 9 November 2016

Accepted 10 November 2016

Available online 18 November 2016

## Keywords:

Reforestation

Community-based forest management

Protected areas

Public-private partnerships

Philippines

## ABSTRACT

In 2011, the Philippines implemented the National Greening Program (NGP), which aims to reforest all degraded areas in the Philippines, approximately 7.1 million hectares, by 2028. The NGP includes a harmonization strategy to coordinate with the wide range of stakeholders involved in reforestation, which may help to overcome some challenges experienced by earlier programs. This case report discusses the experience of one people's organization inside a protected area to assess various impacts of the public-private partnership with a geothermal company, and outlines how the harmonization strategy may help achieve the national target not only in terms of area contributions, but also by improving the outcomes of community-based efforts.

© 2016 Published by Elsevier Ltd.

## 1. Case report

The Philippines is a biodiversity hotspot and a megadiverse country known for its extensive deforestation, but it also has a history of state-led initiatives for reforestation and rehabilitation dating back to the early 1900s (Pulhin et al., 2006). Since the mid-1970s, there has been increasing multi-sectoral involvement and, especially since the 1980s, high citizen involvement. In 1995, community-based forest management was declared the national strategy for sustainable development of forestlands, giving communities the primary role in forest conservation and reforestation activities. The strategy was operationalized in the Community-Based Forest Management Program, under which state-registered people's organizations are issued community tenure contracts over areas wherein they are responsible for forest conservation, and they gain access to livelihood projects in the form of payments to carry out planting activities commissioned by the state. Overall, however, outcomes of past programs have been poor: socioeconomic benefits have been largely limited to short-term payment-for-labor, sites have often reverted to agricultural land uses after the end of projects, and the trees most commonly planted have been fast-growing exotic species (*ibid*).

In 2011, the Philippines instituted its latest reforestation initiative, the National Greening Program (NGP), led by the Department of Environment and Natural Resources (henceforth referred to as 'the state'). The NGP is a target-driven program that originally aimed to reforest 1.5 million hectares by 2016, and since expanded

to cover all degraded areas in the country, approximately 7.1 million hectares, by 2028. The state's long-standing struggle to balance poverty alleviation with forest conservation and reforestation is even more complicated given the scale of the NGP target since most of the degraded lands are inhabited and in use by some of the most impoverished people. In line with the forest landscape restoration framework, the NGP identifies different reforestation approaches for different areas to account for different socioeconomic and environmental objectives: it calls for indigenous species to be planted to rehabilitate and restore degraded forestlands and protected areas, and fruit trees and fast-growing exotic species to be planted in agroforestry and production areas. Its strategy for implementation is similar to that of older programs: the primary responsibility for the establishment and maintenance of NGP sites lies with people's organizations whose members are paid for said activities. For people's organizations with community tenure agreements, such as those under the Community-Based Forest Management Program, they also have management responsibility over the sites through the duration of their tenure contracts and in exchange they may reap the benefits of permitted harvests from the plantations, though for sites inside protected areas there are harvesting restrictions. Given that it takes the same community-based approach as past efforts, the question is: how can the NGP achieve better and more sustained outcomes to reach its target?

One possible pathway to improved outcomes is through the harmonization strategy of the NGP, which aims to coordinate activities of the wide range of stakeholders involved in reforestation efforts (government agencies, private sector, local government units, and civil society), and bring together all reforestation

E-mail address: [d.cagalan@cgiar.org](mailto:d.cagalan@cgiar.org)

achievements as contributions toward the national target. This paper discusses the experience of one people's organization to identify some of the issues that limited the success of past programs that the NGP risks repeating, and to assess how the public-private partnership with the Energy Development Corporation (EDC), a private geothermal company, may (or may not) help to overcome them. It illustrates the innovative potential of the harmonization strategy, which facilitates not only adding area toward the national target, but also improving outcomes of community-based efforts.

EDC is one of the major private sector partners for the NGP and has its own reforestation program called BINHI, initiated in 2008 with the goal of restoring 1000 ha of forest cover per year for ten years, with special emphasis on indigenous and endangered species to enhance biodiversity. In line with the national community-based strategy, EDC implements its reforestation program by partnering with people's organizations whose members are paid to establish and maintain the sites. Many of the same people's organizations are also contracted with the state for NGP sites. The contributions of EDC's reforestation program to the NGP, particularly in the protected area context, are illustrated in the experience of a people's organization called Bagong Silang BINHI Farmer's Association, Inc. (BSBFAI), located within the Northern Negros Natural Park in the province of Negros Occidental. BSBFAI has a 300 ha EDC area (150 ha with mixed indigenous species, 150 ha with mixed indigenous species and fruit trees), as well as various NGP areas (mixed exotic species, indigenous species, and fruit trees).

## 2. Creating "Communities and building capacity

BSBFAI was originally formed as a people's organization in 1999 (under a different name) as part of the Community-Based Forest Management Program. Its formation was initiated and assisted by the state. It is often the case that the state organizes and registers a people's organization where one is not pre-existing for the purpose of implementing its community-based programs. BSBFAI was issued a 25-year renewable community tenure agreement for 706.6 ha within a then forest reserve, now a national protected area. As described above, the agreement stipulates that BSBFAI is responsible for protecting the forest within its tenure area, and in exchange is given access to plantation projects to support its members' livelihoods. When the initial livelihood projects ended in the early 2000s, however, BSBFAI became inactive and no longer continued the livelihood or protection activities. The eventual failure of projects after the end of funding and organizing activities by the implementing agency/organization is a common occurrence in the Philippines. This failure is in large part due to a mismatch between the paradigm of community-based forest management under which social cohesion and the desire to work for the common good are assumed to be present, and realities on the ground where this is not always the case, especially when people's organizations are organized by the project implementer and are not pre-existing with institutional structures in place. This was the case for BSBFAI, whose members are smallholder farmers primarily concerned about their individual livelihoods, and they did not have prior experience in community decision-making and resource management (Cagalanan, 2015).

In 2011, after several years of being inactive, EDC re-organized (and re-named) BSBFAI to be a community partner for its reforestation program. BSBFAI's reactivation made it an eligible community partner for the NGP as well, and within its tenure area, BSBFAI now has both EDC and NGP reforestation sites. The reactivation was similar to the initial activation, with the members being organized and registered as an accredited people's organization under the ini-

tiative of EDC and not themselves. However, since the reactivation, EDC has remained active in community organizing and capacity building, which has helped to drive BSBFAI's success. EDC has forest ranger staff that attend almost all BSBFAI monthly meetings and regularly arrange workshops and trainings to address critical issues at the community level, including: building social capital, respect and cooperation; addressing logistical issues regarding how to manage community activities and share labor requirements and benefits; improving awareness of rules and regulations; and settling disputes. EDC assisted in the development of BSBFAI by-laws and facilitated elections of organization officials. EDC has helped BSBFAI coordinate activities and resolve problems in the EDC and the NGP reforestation sites. While officers of the state have also conducted some workshops with BSBFAI, and attend many monthly meetings to manage activities when their projects are ongoing, the long-term and regular community organizing and capacity building that EDC has conducted is far greater than what the state has the funding and personnel availability to undertake (EDC projects generally last 5 years, compared to state projects that typically last 3). In fact, EDC "adopted" part of BSBFAI's NGP site, extending the maintenance phase after the shorter NGP funding period ended.

EDC's efforts appear to be having a positive impact on organizational capacity and initiative of BSBFAI members. Even when the EDC rangers are not present, BSBFAI continues to organize activities, keep records, and address problems in its projects. Moreover, with initial planning assistance by EDC, BSBFAI saved part of its reforestation payments and invested the money in its own community livelihood projects, including the purchase of several hectares of piñahan (pineapple farm) and talamnan (irrigated rice paddies), which BSBFAI manages on its own. The capacity building work of EDC has helped BSBFAI gain recognition as a top performing people's organization, which has made it a desired community partner for other projects. BSBFAI has new projects beginning now.

## 3. Expanding incentives and reducing threats

The NGP faces a notable challenge for restoration with indigenous species in protected areas, which paradoxically stems from protected area policies aimed at preventing deforestation. The harvest of indigenous species in protected areas is generally prohibited. For planted trees, even for exotic species, there have been frequent changes in policy regarding their harvest, which has resulted in a lack of trust among communities who fear they will not be able to reap the future benefits from a long-term investment in tree-planting (Pulhin et al., 2006). Protected area policies thus limit the potential socioeconomic benefit for communities involved in reforestation compared to other areas where such strict rules limiting or preventing tree harvesting are not in place. Since the NGP places emphasis on restoration with indigenous species in protected areas, the challenge is how to make communities in protected areas, such as BSBFAI, interested in planting indigenous species and protecting them indefinitely, without the prospect of future harvests. The main incentives for BSBFAI to establish and maintain its EDC and NGP reforestation sites are the payments for labor noted above. EDC and NGP projects both offer an additional incentive mechanism in the form of a retention fee at the completion of projects for sites that achieve an 85% or better survival rate. BSBFAI may also harvest fruit from planted fruit trees, and non-timber forest products such as rattan, which has been planted between trees in some areas.

EDC has taken steps to address other challenges for successful restoration with indigenous species in protected areas. For example, quality planting material for exotic species is more widely

available than for indigenous species, which has resulted in the overwhelming use of exotic species in reforestation (Tolentino, 2008). EDC has been instrumental in the development of a nursery network for indigenous species across the Philippines: EDC manages its own central nurseries at its geothermal sites across the country, and each people's organization with which EDC partners for its reforestation program establishes a community-managed satellite nursery. BSBFAI established its nursery with funding and technical assistance from EDC when it was reactivated in 2011, and EDC funding continues to support salary for three BSBFAI members as regular nursery staff. BSBFAI has been awarded special recognition by the state for outstanding achievement in seedling production. At a given time, BSBFAI's nursery may have seedlings of more than twenty different indigenous species. BSBFAI's seedling production results in improved access to indigenous species germplasm for use in its own EDC and NGP sites and more broadly, since it also produces seedlings for other reforestation projects across Negros Island. EDC plays a leading role in linking BSBFAI with buyers and organizing the orders. Seedling production provides a source of supplemental income to support the livelihoods of BSBFAI members, who are paid per piece for seedlings produced for the establishment of BSBFAI reforestation sites and for seedlings ordered for projects elsewhere.

Additionally, a failure to address the causes of deforestation has contributed to the failure of past reforestation programs (Pulhin et al., 2006). Indeed, long-term survival of planted trees is dependent upon reducing threats to reforestation sites. Proximate threats to BSBFAI's reforestation sites include destruction of seedlings (primarily by non-BSBFAI members), and fire resulting from prolonged droughts, which have been a recurring problem in recent years. EDC has led the effort to capacitate BSBFAI to protect trees and prevent deforestation in the EDC and NGP sites as well as in nearby forest areas. EDC organized a patrol group of BSBFAI members and trained them on how to conduct patrols, monitor areas, take tree inventories, and identify threats with protocols for responding to them. The state relies on this same patrol group for the NGP site, and some trainings have been conducted jointly by EDC and the state. The members of the patrol group have salary support primarily from EDC (some from NGP). In addition to carrying out regular patrolling, monitoring, and firefighting in the EDC and NGP sites and nearby forest areas, the patrol group also maintains a water tank and hose system that the nursery depends on during the dry season.

#### 4. Conclusion

Since community-based forest management is the national strategy, achieving positive reforestation outcomes to reach the NGP target depends on identifying successful mechanisms to capacitate and motivate communities. This is especially challenging when there is limited experience in community decision-

making and resource management, and in protected areas where harvesting rights are limited. The experience of BSBFAI illustrates how increased and longer-term investments in community organizing and capacity building, including for project management, nursery management and indigenous seedling production, and monitoring and protection, have positive impacts for restoring degraded forestlands with indigenous species in the protected area context. However, the state faces fiscal and human limitations making it difficult to achieve the kind of continued activities that EDC is able to support. The harmonization strategy of the NGP offers a governance framework to expand public-private partnerships that may help achieve the national target not only in terms of area contributions, but also by improving the outcomes of community-based efforts.

The impacts of EDC's reforestation program with BSBFAI go beyond adding 300 ha toward the national NGP target. All BSBFAI reforestation projects benefit from improved social capital and technical capacity, and the production of indigenous species seedlings. BSBFAI seedling production increases access to indigenous species germplasm for reforestation projects across Negros Island as well. The trained patrol group helps to protect reforestation sites and nearby forest areas from destruction. EDC has helped BSBFAI earn a positive reputation, resulting in increased opportunities for additional projects. Ultimately, the prospects for impact continuity are improved by: the extended period of community organizing and capacity building for community-based forest management, the experience with managing savings and investing it in community-driven projects, the good performance-project access feedback, indigenous seedling production being an income-generating activity, and having a trained community patrol group. Still, BSBFAI faces significant challenges. The members understandably continue to prioritize their individual livelihood needs over community benefits. It remains to be seen whether BSBFAI will continue to function successfully as a people's organization, manage its reforestation sites and community-driven livelihood projects, maintain its nursery, and continue indigenous species seedling production without EDC, NGP, or any other projects with outside funding.

#### References

- Cagalanan, D. (2015). Governance challenges in community-based forest management in the Philippines. *Society and Natural Resources*. <http://dx.doi.org/10.1080/08941920.2014.948242>.
- Pulhin, J. M., Chokkalingam, U., Peras, R. J. J., Acosta, R. T., Carandang, A. P., Natividad, M. Q., ... Razal, R. A. (2006). Chapter II historical overview. In U. Chokkalingam, A. P. Carandang, J. M. Pulhin, R. D. Lasco, R. J. J. Peras, & T. Toma (Eds.), *One century of forest rehabilitation in the Philippines: Approaches, outcomes and lessons*. Bogor, Indonesia: Center for International Forestry Research (CIFOR).
- Tolentino, E. L. Jr., (2008). Restoration of Philippine native forest by smallholder tree farmers. In D. J. Snelder & R. D. Lasco (Eds.), *Smallholder tree growing for rural development and environmental services: Lessons from Asia*. Springer.