

FOREST RESTORATION AND COMMUNITY PARTICIPATION: CASE STUDIES IN THAILAND

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ABSTRACT

Local people are often left out of decision-making processes with regards to forest restoration and are only asked to 'participate' once implementation has begun. This model has been used in most reforestation projects in Thailand. The results are low tree survival rates, lack of interest by local people to assist in protecting forest plantations and relatively low biodiversity. While many have often cited this as evidence that villagers are not interested in participating in forest protection, it actually reveals that local people were not involved in planning and decision-making. This paper describes two instances where villagers were involved in the full planning and implementation of forest restoration activities and explains why they were successful. Once local people are given a meaningful decision-making role the results can often be surprising.

INTRODUCTION

Far too often in Asian countries the potential role of people in successful planning and implementation of restoration projects is underestimated. The state, as sole manager of forest resources in most Asian countries, has tended to limit the role of local people and community involvement in forest rehabilitation activities. The result has been poor success in forest rehabilitation and ongoing resource degradation. In Thailand there are numerous examples where state plantations have been cut down, uprooted, and burned. Reforestation efforts are progressing slowly. At the current rate of plantation establishment, the total plantation area over the past 100 years is less than one year of forest loss during the last three decades (JANTAKAD and GILMOUR, 1999).

While media coverage and technical reporting have been critical of villagers for their role in deforestation and ongoing burning of forest lands, the fact is that many conflicts arise because local people were not involved in the planning and design of reforestation and forest rehabilitation efforts. Villagers may want to restore local forests but the state's approach to reforestation with single tree species commonly runs contrary to community needs (cf. JANTAKAD and GILMOUR, 1999). Monotypic plantations do not perform the same role or offer the same products as natural forests and commonly villagers are not permitted to use the wood produced. Conflict arises out of villagers' desire to protect the land they use and their livelihoods.

Studies are beginning to arise which show the benefit of including villagers in restoration and conservation activities. STEINMETZ (1998) working in protected areas in Southern Laos found local people in and around parks to be knowledgeable about local biodiversity and ecosystem processes. Further, he found that by working equally with local people, western scientists and local park staff a partnership could be forged which resulted in the identification and protection of natural resources.

The purpose of this paper is to highlight two case studies from Thailand which demonstrate the importance of fostering trust and positive relationships with and within communities in community-based restoration efforts.

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TWO CASE STUDIES IN THAILAND

From *Imperata* Grassland to Wildlife Conservation

Khao Paeng Ma, a denuded mountain covered with *Imperata* grass (forming a part of the Lampra Proeng watershed area flowing into Mun River in Amphoe Wang Nam Kheo, Nakhon Ratchasima Province) was once named by villagers as the mountain of fire because of the widespread annual fires during the dry season. The area was originally covered with dry evergreen forests, which were extensively cut by logging and cleared for cattle grazing and cash crops such as corn and cassava during the late 1970's. Currently, this area is the forest reserve surrounding Khao Yai National Park.

In 1994, the Wildlife Fund Thailand implemented the Forest Restoration Programme as part of the five million Rai Golden Jubilee Project (WILDLIFE FUND THAILAND, 1999). Prior to 1994, Wildlife Fund Thailand had implemented a rural development-conservation project in the surrounding villages, namely in Ban Klong Sai, Ban Klong Ee-Paew, Ban Poh Thong Watana, Ban Klong Durian and Ban Khao Paeng Ma. Due to the poverty problems in these villages, the project first attempted to solve the debt problems by supporting the village revolving fund and introducing agro-forestry (including fruit tree and bamboo production to replace mono-cropping of cassava and corn) as well as community forests. Supporting these processes allowed for building rapport and trust between the villagers and project workers. The denuded forest reserves totalled up to 11,250 rai (1 ha = 6.25 rai). Most denuded areas have actually been used and claimed by some local influential people. It took some time to negotiate and resolve the land use conflicts with this group, as some part of this denuded forest has been locally used for a long time, so only 5,000 rai out of 11,250 rai could be used for the forest restoration program.

Supplementary planting was the chosen method of planting. Clearing by slash and burn were not implemented. The area includes native species and food species for wildlife such as *Ficus*, *Eugenea*, *Flacourtia*, *Muntingia*, *Sandoricum*, *Parkia* and *Baccaurea*.

Fire protection is regarded as the most important factor in this *Imperata* grassland restoration, and thus the project has created fire crews, fire detection and fire education campaigns in the surrounding villages. Fire breaks and patrols were set up to prevent the spread of fire. Protection measures were easier to negotiate because some rapport had already been built between the project manager and the villagers. The community agreed to inform the project manager prior to burning farmlands to reduce the threat of fire in the restored areas.

Cattle grazing is another factor which promotes *Imperata* grassland. Farmers burn the grassland to produce new shoots and for fodder. Negotiations were made with the cattle graziers to find alternatives, such as assigning designated grazing areas, alternative fodder types, etc. Hunters, another interest group, like to travel to the areas and light fires, and so have been frequently included in the project activities, with some being employed by the project. By maintaining positive relationships between the project and community, (e.g. organising social events together), and showing the commitment of project staff to the serious nature of the project, the number of fires has decreased significantly. This has allowed not only the plant community to change, but also the animal community. *Imperata* grass is now replaced by *Eupatorium odoratum*, wild banana, bamboo, herbs, shrubs and many species of vines that are palatable to wild mammals. Gaur (*Bos gaurus*) numbering 2-3 individuals at the outset of this project now can be seen in herds as big as 39. Other animals frequently found are wild pig (suid), deer, bear, jungle fowl, viverrid, mustelid and snakes. Large herds of wild pigs eased plant germination by helping to loosen the ground through their natural process of rooting. Other tree species like *Anthocephalus*, *Macaranga* and *Dipterocarps* are also found in the areas. Currently, there are no rifles in Khao Paeng Ma, which aids animal protection measures. The people's attitudes have changed with time from collaborating in forest restoration programmes through fire protection to enhance natural regeneration and wildlife protection. Now there are visitors to these areas to observe the big herd of gaur on the regenerated forestland. Villagers are proud of their resources.

The case clearly shows the strong support of local communities in a restoration programme. This happens because positive relationships have been built through attending to local developmental needs and resolving land use conflicts. Villagers have indicated the benefits of restoration, including bringing back the flow of water and sparking interest in developing ecotourism.

Pred Nai Village: Returning of Wetland Birds and Macaque Monkeys

Pred Nai Village is situated near a mangrove swamp located in Trad Province next to the Cambodia border. The village has been occupied for more than one hundred years.

In 1985, the villagers observed that the logging mangrove concession did not follow the logging regulations because trees were still being over-cut. The logging also caused many other problems. The forest loss led to the reduction of local fishery products and villagers were prohibited from harvesting crab, shells, fish and other non-timber products in the concession areas. Illegal mangrove logging also took place outside the concession area. At the same time a group of local influential men occupied the mangrove forest which they then converted into shrimp farms and built a water gate to block seawater, exacerbating the problem. In 1986, the villagers themselves formed a group to stop the logging and shrimp farming. The villagers' effort was successful in destroying the gate blocking the seawater, and they were able to keep forestlands equalling about 12,000 rai.

In 1987, the villagers planted the logged over and denuded mangrove areas, totalling about 700 rai, with the support of both the Royal Forest Department (RFD) and Provincial Authority. Though villagers put a stop to the concession and shrimp farming, the problems of uncontrolled cutting by villagers and outsiders continued. Fortunately, by 1995 the conflict within the village was resolved by their open dialogue. The villagers of Pred Nai agreed to start using grass canes for supporting cucumber and bean vines instead of using mangrove trees.

After villagers formed the Village Saving Fund Group in 1995, they were trained by a monk, Pra Subin Pyuto, and formed the Mangrove Forest Management group as well as other production activities like the housewife group, youth group and women volunteer group.

Through the Social Investment Fund, villagers of Pred Nai procured a patrol boat and built a bridge for seedling transportation to the interior degraded parts of the forest. The Ministry of Environment also allocated some funds from the Environmental Fund to the community for the villagers to manage their own mangrove reforestation programme. Since mangrove crabs are an important source of income to the villagers (this kind of crab is popular for Som Tam or papaya salad), the community has now established rules to collect crab. There will be no harvesting in October during the reproduction period. Some farmers reported that after management of mangrove forests and rehabilitation implementation, the crab harvest has increased from 5 kg/harvest to 8-10 kg/harvest.

Villagers have reported that shrimp, shells and fish have also increased. Many birds like *Mycteria leucocephala*, *Porphyrus poliocephalus*, *Ardea purpurea*, *A. cinerea*, *Dendrocygna javanica* and *Haliastur indus* are returning (PETROLEUM AUTHORITY OF THAILAND, 1999). Just a week ago it was reported that monkeys (*Macaca fascicularis*) were seen passing the villagers' houses. During the logging period, the monkeys migrated to other far-away parts of the province. School kids and urban people from nearby areas visit the restored areas at night to view the abundant fireflies. In helping the villagers with management plans and forest resource mapping, the villagers revealed their apparent knowledge of their resources. The resource maps have been completed and the management plan is now being developed.

Restoration is an ongoing process, which is depicted by the villagers expressing an interest in increasing their planting, carrying out experiments, thinning the dense natural stand of *Ceriops* and continuing to monitor and improve the crab harvesting regulation.

The Pred Nai Community receives support from the Provincial Authority after their successful effort in stopping the logging. The governor has expressed interest in seeing other villages in his province implement similar mangrove forest restoration activities. Consequently, this has empowered the villagers in continuing active forest restoration and wildlife conservation.

LESSONS LEARNED

Reforestation projects exclusively run by the government has faced many problems and achieved limited success. Rehabilitation for wildlife is a challenging undertaking that is exacerbated without active participation of local communities. Restoration activities are likely to fail in areas where resources and land use issues remain unresolved. Fortunately, there is a growing trend in governments in Asia towards the

decentralisation and devolution of power to local communities. The rights of indigenous peoples' and communities are now being openly considered. In Thailand a statement which strengthens the rights of local communities to care for and use natural resources is now embedded in the newly reformed National Constitution.

Case studies in Thailand show how people can be mobilised to address local concerns and in doing so make substantial gains in restoring lost habitat and developing sustainable resource use systems. Community participation, capacity building and resolution of underlying resource and land use conflicts were the basis of these successful restoration efforts.

The role of community participation should be considered from the onset of any restoration effort. Gains made in the area of habitat restoration are likely to be based on the development of equal partnerships with local communities as well as effective support in the form of local community capacity-building and conflict resolution.

CONCLUSION

Several experiences have indicated that participation in forest restoration happens only after the resolution of conflicts over land use. People want to maintain and restore their local environment, as it is vital to their daily life. By empowering the villagers and focusing on the communities' local knowledge and need, they are valuable partners in assessing, planning and managing their resources. This process generates mutual trust and partnership, which allows the villager's capabilities to extend further from forest restoration to wildlife conservation to other resource management.

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QUESTION AND COMMENTS

John Parrotta

The example of the mangrove rehabilitation and community project seems very successful and perhaps allows for the opportunity for a monitory fund to be established. Could you please elaborate on the monitory fund and how it was established?

Somsak Sukwong

We only have the rough data now from recent surveys, but what it is showing us is that in the mangrove forests many birds are reappearing. We have also observed many water birds and migratory birds. We have also recently seen monkeys in the area. In fact, two weeks ago we visited a village where some villagers encountered a monkey in front of their house. This is very encouraging as these animals are coming back into the buffer zone. The people participate in not only tree restoration but also wildlife conservation.

Smansnid Svasti

I agree with both speakers that development must take place along side conservation, which is the way we worked in Mae Soi. Once the villagers realise that it is their responsibility to take care of themselves, then everything falls into place. Somsak's project almost perfectly parallels the Mae Soi project I am currently working on. Who were the people, if any, which occupied your project rehabilitation area in the uplands? Were they hunter-gatherers? What negotiations transpired to get the villagers to help you in reforestation, and did they express interest from the very beginning?

Somsak Sukwong

Community reforestation projects can be very difficult, as in most cases people occupy the land. Sometimes it is necessary to have built up a previous positive reputation through an individual person or agency to help achieve successful results. We have been fortunate that Wildlife Fund Thailand (WFT) carries out our project, which has already developed a good reputation. Organisation is crucial to facilitate passing through this critical stage. For me, the government agency takes the negotiating roles, so they are actually trying to regain the trust that has been lost over the past 400 years. It is complicated to work with people, and I am still learning how to build up partnerships. It is an art form. No body lives in our project area, as it is just denuded land. In this mountainous area, there is no water, and therefore no village. The village is located down the valley. Our area, however, could be used for grazing or as a resort.

Nigel Tucker

Where did you get the money for the mangrove project, and is it an ongoing source?

Somsak Sukwong

The first attempt is by exerting initiative, such as stopping the logging concession., collecting seedlings and planting. Later the Environmental Fund gave us 15,000 Baht to rehabilitate the project area. I am interested in how they organise and manage it, as well as how we can use the fund efficiently so that the money is not wasted. Now the government is trying to budget the project, but this has led the villagers to be concerned that if they are using the budget provided by outside sources, then the plantation will not belong to them.

Abdur Rashid

I am interested in the concept of participatory forest management. Could you please expound on your project with mangrove forests in relation to working with the local people. First the forest was being destroyed due to its proximity to people, and then the participants rehabilitated it. And could you talk more about the crop sharing?

Somsak Sukwong

The participants just started to protect and manage their resources, and consequently the forests felt important to the people. But we are not directly interested in mangrove woods, but rather microprods, e.g. crabs and fish, and the environment. The participants even try to stop their own people from cutting down the mangroves.

Abdur Rashid

After the implementation of your concept, have any of your projects been successful, and what was the number of beneficiaries involved? Also, what is the method of the contract between the government and community? Finally, I would like to know more about benefit sharing of communities?

Somsak Sukwong

Government officials believe that the Royal Forestry Department really wants to protect the forest. The rural development unit is also involved in this area. Benefit sharing is not in terms of money nor financial advice, but rather in the richness of participation, as this is the common objective. With regards to social forestry, we have been developing a community forest which covers 400 rai of land, with different communities who take care of their forests, protect it, conserve it, put in animals and plant every year. A tragedy occurred last year with fire sweeping through the land. We are currently using measures to protect the land from fire.