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Living with Nature? Assessing Resettlement from a National Park in Thailand

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One of the most active debates in the field of conservation is about whether people should be allowed to live and work within the boundaries of nature reserves. A new piece of research from Thailand has investigated this question in the context of one of the country's most important protected wilderness areas. The study found that resettlement was not only unnecessary, but would actually cost more - environmentally and socially - than letting the farmers stay and help manage the park. ➔

A summary of EEPSEA Research Report 2003-RR10, A Cost-Benefit Analysis of Resettlement Policy: A Case Study of Ob Luang National Park, Northern Thailand by Orapan Nabangchang (Sukhothai Thammatirat Open University, Tambon Bang Pud, Amphoe Pakkret, Nonthaburi, Thailand. Contact: ecassora@samsorn.stou.ac.th or nabangchang@hotmail.com)

The villagers of Ban Pa Kluay *show*

→ Orapan Nabangchang from Sukhothai Thammarat Open University in Nonthaburi undertook the study. She investigated a long-running resettlement dispute among people living in and around a protected area in Chiang Mai province to find out the best way to resolve the conflict.

A village in a park

Ban Pa Kluay village was Nabangchang's study site. It is one of several villages in Tambon Maesoi, Chom Thong District of Chiang Mai Province. Lying 1,400 m above sea level in the basin of the Mae Piah, Mae Pok, Mae Pim and Mae Soi rivers, the village is inside Ob Luang National Park, one of the country's last remaining areas of rich biodiversity. There are 86 households in the village and the community farms the land in its immediate vicinity. They also utilize the forest by collecting timber and non-timber forest products. Although the villagers are currently prohibited from encroaching any further into the protected forest, they have in the past been responsible for the conversion of large tracts of this area into farmland.

Water supply sparks conflict

These villagers have been involved in a long-running conflict with

downstream villages. These neighbours blame Ban Pa Kluay for stopping the flow of the Mae Soi river, a major source of water for agriculture and domestic consumption. Although foresters and scientists are not convinced that the farming activities at Ban Pa Kluay are entirely to blame, the downstream communities have gotten together to protect the Mae Soi watershed. They have put up physical barriers, replanted trees and made forest fire protection lines. They have also called for the villagers of Ban Pa Kluay to be removed from the National Park and resettled elsewhere. In order to find out if this is the best solution, Nabangchang undertook a cost-benefit analysis (CBA) of several courses of action.

To get the information needed, she interviewed three main groups of people. Nabangchang first interviewed all the households in Ban Pa Kluay. She then interviewed farmers downstream from the village. These included active campaigners for resettlement as well as some not involved in the conflict. Other interviews were conducted with officials and technical experts to get background information about issues such as deforestation, watershed conservation, water quality, health, population, as well as social and economic conditions.

The agencies interviewed included the Chiang Mai regional forest office, the district health office, the water supply authority, local environmental NGOs and the Community Development Department.

Status quo, resettlement or compromise?

Nabangchang used this information to analyze three options for solving the problems of Ban Pa Kluay and its neighbours. The first was the status quo. This scenario assumed that nothing would change and that the inhabitants of Ban Pa Kluay would continue to use the forest as before. Nabangchang next analyzed a compromise scenario whereby Ban Pa Kluay's inhabitants would be granted conditional rights to stay in their village, provided they enter into a partnership with local enforcement agents to patrol and protect the forest. This arrangement would entail financial and legal provisions for monitoring and protecting forest resources around the village. Under this scenario, the collection of forest products would not be permitted but an area would be set up as a community forest. Additional occupational promotional measures would be provided to ensure that settlers are able to sustain their level of income from the land.

ld be allowed to remain in the forest

The third scenario was resettling the villagers to a place outside the protected area. Action would also have to be taken to provide them with employment at their destination. Other measures would be needed to rehabilitate the degraded forests left behind and to prevent both the return of Ban Pa Kluay residents and encroachment by newcomers.

Calculating costs

Nabangchang conducted a CBA of these three scenarios by calculating how they would affect factors such as the economic use of the forest, soil and water conservation, biodiversity, the carbon storage value of the forest and land use. She then

calculated the economic value of these changes, relying in part on benefit transfer (i.e. borrowing values for similar assets from previous studies done elsewhere). Nabangchang then worked out the overall costs and benefits of each scenario and how these costs would be divided between the upstream and downstream communities. She then calculated the Net Present Value (NPV) of each scenario. (This expresses the sum of various income streams over time as a single value in the present.) Nabangchang also investigated variations on these scenarios, including situations in which deforestation was controlled, resettlement delayed and the impact of carbon sequestration ignored.

Compromise comes out on top

As anticipated, Nabangchang found that the major losers from the status quo are the communities downstream from Ban Pa Kluay. Overall, the net cost of this first scenario to the downstream communities was some 159.87 million Baht (USD 3.75 million). And downstream communities were not the only losers. NPVs were negative for all variations of this scenario except one where deforestation was radically controlled.

Resettlement was also found to have predominantly negative NPVs. In fact, resettlement would be economically feasible only if it could be launched very quickly. Since resettlement has been debated for almost two decades, this seems unlikely.

Under the compromise option, Nabangchang found that Ban Pa Kluay's villagers would continue to reap benefits from their village land and from the community forest. This fact, coupled with the benefits this option would bring for the environment and the downstream communities, meant that the NPVs of the compromise option were the highest of all the scenarios. The maximum value was 211.415 million Baht (USD 5 million). Although this scenario would require a number of investments to protect and conserve

BENEFITS AND COSTS TO UPSTREAM AND DOWNSTREAM COMMUNITIES (in thousand Baht)

	Upstream			Downstream		
	Benefit	Cost	NET	Benefit	Cost	NET
Status quo	101,995	74,332	27,663	0	159,873	-159,873
Compromise	47,720	43,812	3,908	247,103	39,596	207,507
Resettlement	67,226	50,893	16,333	53,668	111,029	-57,361

BENEFITS AND COSTS OF FOREST PROTECTION OPTIONS (in million Baht, net present values at 6% discount rate)

Unit: Baht

Policy Options	Benefit	Cost	NPV
Status quo	101.995	234.205	-132.21
Compromise	294.823	83.408	211.415
Resettlement	229.539	162.922	-42.03

the forest, these costs would be spread over a 20-year period, with a yearly cost of less than 10 million Baht (USD 0.23 million).

Living in harmony with nature

Nabangchang concluded that the villagers of Ban Pa Kluay should be allowed to remain in the forest, provided they abide by the conditions of the compromise scenario. Because this scenario

would involve minimal change (compared to resettlement) it would also be more feasible, politically and socially. Nabangchang believes that the grassroots Tambon Administration Organization (TAO) would be best suited to implement the plan since it could provide a forum where problems could be discussed and resolved. She also recommends that community land use rights be granted, to legally

acknowledge the collective rights of members of Ban Pa Kluay; these can be withdrawn if members fail to abide by the rules to protect the forest.

This research not only offers a way to resolve the Ban Pa Kluay dispute; it could also provide a model for conflict resolution in similar situations throughout Thailand.

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