

**FULBRIGHT RESEARCH REPORT
TROPICAL FOREST/NATIONAL PARK
ADMINISTRATION AND TRAINING IN
THAILAND**

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ABSTRACT

From July 19, 1988 to March 31, 1989, the writer served as Senior Fulbright Research Scholar, South East Asia Region, where he did research on tropical forest administration and training in Thailand. Interviews with scores of park staff, forest monks, local residents, tourists and forestry scholars detailed a variety of concerns, among those being park security and protection from illegal encroachment. The author offers recommendations for national parks in the areas of administration and training, naturalist interpretive programs, nature tourism and Buddhist forest monasteries. (Note : Though the research included trips to Indonesia and Malaysia, this article will limit its scope to discussion of parks in Thailand.)

INTRODUCTION

Approximately 15% of Thailand's area is in natural forests. Almost all of these natural forestlands are in protected areas (about 12%) such as national parks, wildlife sanctuaries, and non-hunting areas. New areas in all categories, particularly national parks, are being proposed (International Symposium, 1988.) Consequently, this research was revised and approved to focus on national park administration and training.

The majority of the research was conducted in the field with study visits to 15 national parks and one wildlife sanctuary (brief visits to Indonesia and Malaysia inclusive.) The field research included studies of areas surrounding national parks, including villages and Buddhist forest monasteries. Research in Bangkok and other locations consisted of interviews and data collection from various governmental and nongovernmental

organizations such as the National Park Division, Royal Forest Department, UNEP, FAO Regional Office for Asia and Pacific, USAID, Thailand Wildlife Fund, Faculty of Forestry at Kasetsart University, Wildlife Research Institute, Buddhist Forest Monasteries, Mahadol University and Bangkok Bird Club.

METHODS

Because of the current and controversial nature of this research, it is very important not to reveal names of the people interviewed, and, in some cases, locations. The majority of the research data was obtained through personal interviews with experts from governmental and nongovernmental sources, national park personnel, academics, Buddhist forest monks, villagers, tourists and interested parties. The approach

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to the research was qualitative, interdisciplinary, normative, and holistic. The researcher has had considerable experience using interviewing methods in the field and other locations under an interdisciplinary orientation. The research centered on getting at the underlying issues, values, issue interrelationships, and innovations of the individual and collective components of the subject. Much of this research involved qualitative interview methods with informal discussions and open-ended questions which would encourage exploratory and in-depth communications for exploring the above issues.

The field work included spending sufficient time in the "backcountry" of national parks to comprehend the current situations and atmosphere of the areas as well as to understand the interior problems. Preliminary work involved review of pertinent literature on the subject. A large amount of data was collected from various individuals and organizations, including reports and studies, in Thailand, Indonesia, and Malaysia.

RESULTS AND DISCUSSION

National Parks

Almost all of Thailand's remaining natural forests are in protected areas such as national parks and wildlife sanctuaries. New national parks are currently being proposed to add to the 59 national parks which are now gazetted. Approximately 80 percent of Thailand was forested 50 years ago, with less than 20 percent in forestland today (Kabilsingh, 1987.)

There is now a logging ban in Thailand, largely due to illegal logging operations which resulted in flash floods that killed 350 people and buried over 300 homes under sand in Nakhon Sithammarat Province in Southern Thailand in November, 1988 (Rao, 1988.) There is considerable attention being given to establishing new national parks beyond the 59 now established. Some

reports indicate that there may be as many as 100 national parks eventually. Worldwide awareness is growing that tropical deforestation is an urgent and global problem. Tropical forests and their rich biological diversity are rapidly disappearing at rates of 70 to 100 acres per minute. *Global Future* states, "the best projections indicated that unless governments, individually and collectively, take action, much of the world's tropical forests will be scattered and highly degraded remnants by the first quarter of the 21st century" (Council on Environmental Quality, 1981.) Thus, present and future protected areas such as national parks and wildlife refuges may well be the only feasible and permanent way of saving some of the remaining tropical forest areas and their rich biological diversity.

However, most protected areas in tropical forest countries like Thailand are currently under severe depredations due to poaching, logging and various other encroachments. These depredations are often associated with nearby villages where some individuals may engage in these illegal activities. The end results are irreversible and destructive for protected tropical forest areas and their biological diversity.

Some of the negative results include: a) removal and disruption of endangered keystone wildlife and plant species; b) illegal logging of trees and agricultural encroachments with consequent disruption of the environment for the natural ecological processes, biological research, and nature tourism; c) degradation and destruction of the ecological and biological integrity of the relatively undisturbed protected areas, including their watersheds and scenic quality (IUCN, 1986; Trisurat, 1989.)

As a result of these depredations, many national parks and wildlife refuges become merely "paper" parks and wildlife refuges with severe inroads into their biological diversity and ecosystem integrity. This prob-

lem can be considered an almost ubiquitous one for most tropical forest countries like Thailand. Administrations associated with protected areas are often forced to allocate the majority of their personnel, funds and time to law enforcement efforts to control these depre-dations. These efforts, in turn, reduce or remove priorities and allocations from other vital areas of protected areas administration such as planning, wild-life management, naturalist interpretive programs, visi-tor services, and research. Domestic and international visitation to national parks is rapidly increasing with its own impacts and issues.

Issues, Values and Innovations

The following areas are now considered for mee-ting the above challenges: 1) Administration and training; 2) Naturalist Interpretive Programs; 3) Nature Tourism, and 4) Buddhist Forest Monasteries. Specific recommendations by the researcher for national parks are included in the Conclusions.

Administration and training :

Almost all park superintendents and park per-sonnel identified illegal logging, poaching (illegal hunting) and agricultural encroachments (usually commercial crops such as cassava and jute or hemp) as the number one problems facing their administrations. Pitching, or burning the hollow in a tree for its pitch or sap, was also very prevalent. These problems were particularly accentuated with national parks that had extensive and sometimes, poorly marked boundaries with surrounding villages. Problems of this nature destroy and degrade the ecological integrity, biological diversity, and scenic qualities of the park. Due to the extent of the above problems, superintendents and park personnel indicated that much of the funds, personnel, and time of the park was devoted to law enforcement and protection efforts. Some parks and refuges in Thailand may have as many as 50 to 100 personnel who

are hired primarily as park guards.

Yet such enforcement appears to be marginally effective. Security staff seldom penetrate the park interiors where almost all of the violations occur. There were considerable signs of illegal activities if one simply went cross country and away from established trails. These signs included felled trees, poaching huts and stands, signs of killed wildlife (such as a pile of hornbill skulls), cleared land with cassava growing, burned trees, etc. These illegal operations were often found a short distance from park boundary trails which were patrolled.

It should be noted that many of these areas were of varying terrain and thick forest, where poor or nonexistent trail systems make detection very difficult, and encourage poachers to use the back country.

Many of the professional park staff are graduates of a two year government forestry school at prae where the emphasis is on forest management and logging. Most of the very limited four year graduates in forestry who are park superintendents or park rangers are trained in forest management with little educational or training background in national parks or forest recreation. There is also a definite shortage of senior professional staff in the field.

Naturalist Interpretive Programs

No national park appears to have a full-time naturalist assigned to it. In a few national parks, some personnel may be assigned naturalist interpretive duties along with their regular responsibilities, but this ar-rangement allows very little time for naturalist work. Full-time naturalists are needed in all of the major parks so that they can plan and develop programs, to serve as the designated research officer and contact for outside researchers and for internal research programs in the park. With increased tropical forest research projects, there is definite need for special training on the natural

history of plants and wildlife, for public as well as scientific contact. Interpretive planning in the visitor centers should center along the national park story, ecological and tropical forest information, unique features of the area, and other theme lines.

Although increasing, there does not appear to be a great deal of visitation by Thai people to the interiors or backcountry of national parks. Much of the visitation centers around crowded picnic areas or short walks to waterfalls. Thus there appears to be a challenge to naturalist interpretive programs to encourage more awareness of national park and possibilities for longer walks and backcountry use in the park interior.

Nature Tourism

Nature tourism presents an excellent institution or mechanism for protecting national parks as well as providing socioeconomic benefits to local people. There is generally reported to be a decrease in poaching, logging and other illegal activities with the increase in tourism. A certain amount of this could be attributed to increased visitation to an area which discourages illegal operations. Also, with socioeconomic benefits, local people are concerned about the protection of the plants and wildlife resources which attract the nature tourism. This, in turn, tends to discourage those villagers who might engage in illegal operations which would detract from the park quality. Thus, nature tourism would certainly present itself as a very viable benefit with a great deal of potential for villages on the borders of national parks and, in some cases, wildlife refuges. Nature tourism could support local employment of villagers as guides, porters, construction workers, and merchants as well as through food, lodging and handicraft facilities in villages (Saisorn, 1984; Durst, 1988.)

Buddhist Forest Monasteries

In the case of Thailand, Buddhism provides the

foundation of the philosophy and religion of the Thai culture (Sponsel and Natadecha, 1988.) It commands a great deal of respect, integrity and morality from all segments of society in Thailand. Much Buddhist literature, including the Buddhist Perception of Nature Project through wildlife Fund Thailand, portrays strong conservation values, including protection of the natural environment and its life forms or "all beings" (Buddhist Perception Nature, 1987.) Interviews with Buddhist Forest Monks in Thailand revealed strong concerns and efforts for conservation values and nature protection. Thus the Buddhist religion and philosophy provide a strong basis for reverence for all forms of life and for natural habitat to ensure their protection. Buddhist forest monasteries and monks appear to be more oriented toward this approach in contrast to Buddhist monasteries in urban areas.

Many of the 700 Buddhist Forest Monasteries in Thailand are either located near national parks or ajoin the last remaining forest lands in a given area. These can serve as an integrative model, leadership mechanism and institutional framework for influencing the values and behavior of villagers in all aspects of their lives, including conservation and forest protection.

CONCLUSIONS

As a "safe" and popular Asian tropical forest country with numerous scenic and spectacular national parks, Thailand is increasingly becoming the Asian regional center for national parks and tourism. However, without much more effective national park administration and training on a current basis, this potential could be lost along with its natural and national heritage of tropical forests. Without adequate protection, the parks will simply become parks on paper, where logging, poaching, agricultural encroachments and tree pitching continue along with other illegal activities.

Innovative and effective park administration and training, naturalist interpretive programs, nature tourism and Buddhist forest monasteries provide excellent ways for ensuring national park protection for present and future generations as well as socioeconomic benefits for local populations.

Other recommendations include:

Cross-country and "poacher trail" patrols to stem illegal activities. The squads could be made of park and police personnel who had special training for these assignments. The use of outside and special personnel, along with court trials outside the national park area, would greatly reduce the local reprisals which endanger so many park staff. Plane and helicopter patrols would also be advisable.

Definite park boundary markings would be helpful. Buffer zones, or areas of lands adjacent to national parks, can provide added protection while still permitting restricted use of natural resources and selective agriculture by villagers (IUCN/UNEP, 1986.)

Warning signs could be posted in areas where illegal activities have occurred. Such signs might discourage illegal operations by signaling that the areas are noted and under surveillance.

The great majority of park personnel have no academic training; many are used in a combination of laborer and park guard patrol jobs. These staff could greatly benefit from in-service training which involved internalization of national park values and concepts, as well as public participation and community relations between locals and park administration.

Park management need more emphasis on planning. Much of park planning has been neglected due to demands for law enforcement. Almost all national parks studied lack comprehensive master plans which should include zoning, development of trail systems, backcountry camping, naturalist interpretive programs, wildlife

management, and visitor facilities.

One possibility would be to obtain planning grants for having graduate students assigned to various national parks. They could then write their theses on master plans for given national parks. The park superintendent could then serve as adjunct professor with visits from a major professor from a university.

A general complaint from many foreign tourists was the need for adequate trails beyond short walks to waterfalls in the parks studied. Long trails with huts about one day's journey apart would provide more incentives for all park visitors to see the park interior.

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