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Dealing with Contradictions: Examining National Forest Reserves in Thailand

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Abstract

Thailand has experienced rapid deforestation especially since the 1960s. While large areas of forestlands were designated as national forest reserves, many forests were actually converted into farmlands. This article focuses on the institutional and administrative aspects of the national forest reserve system, the core institution of forest conservation in Thailand, and examines the institutional structure, historical process mostly since the 1960s, and procedures of the national forest reserve system and related policies at both in national and local levels. The national forest reserve system institutionally lacked sufficient mechanisms for enforcement and, because local people’s land use was not investigated in advance, the contradiction arose that large numbers of people resided and cultivated land in national forest reserves. While occasionally policies to give cultivation rights to these people were carried out, designation of national forest reserves continued without any structural amendments, and the contradiction was perpetuated. In the procedures of forest protection units, the sole organ for on-the-spot policing, breaches were sometimes overlooked in order to balance the regulations and actual situation of the local people’s livelihood. Forest officers are basically faithful to their tasks, even though they know the system itself substantially fails to function. But they also behave in realistic and flexible ways in applying principles that are far from appropriate to the actual situations they encounter. Institutionalization and activation of such an unrealistic system can also be interpreted as creating a wide range of discretion, which has enabled realistic forest conservation to be carried out as far as possible in the prevailing social or political climate without much friction. In order to argue for a suitable forest conservation system, this point must be taken into consideration.

Keywords: Thailand, forest management, policy, law, implementation, National Forest Reserve

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I Introduction

The tropical forests of Southeast Asia are rich in biological diversity, and the need for their conservation has been increasingly recognized. Though governmental, international and non-governmental organizations have taken various measures, a definitive solution has not been found.

Generally, commercial logging and agricultural expansion are thought to be the causes of deforestation. In particular, deforestation was accelerated in many countries after World War II due to development programs or population increase. Besides these external reasons for deforestation, there are internal factors that caused the failure of forest conservation systems to prevent deforestation. Different countries might have different reasons why forest conservation systems did not function well. In some cases, national policy gave more importance to economic development than forest conservation. Even when governments really tried to conserve forests, peasants’ pressure to transform forests into farmlands might have been irrepressible. The whole process and mechanism by which forest conservation systems were institutionalized, implemented, and ultimately failed are closely related to social and political features as well as the historical background of the country or region in question.

From the above perspective, this essay argues how social features are reflected in the process of forest conservation in Thailand, focusing especially on the institution of ‘national forest reserves’, pa sanguan heang chat, introduced in 1964. Thailand has experienced rapid deforestation since World War II. From the 1960s, the government carried out integrated development policies. Commercialization of agriculture as well as population increase created a number of landless farmers who entered the forests along logging roads and cleared abandoned commercial logging areas.

Regulations for the institution of forest reserves were promulgated in by the Forest Act of 1941, Phrarachabanyat Pumai, and the National Forest Reserve Act of 1964, Phrarachabanyat Pa Sanguan Haeng Chat. The first National Economic Development Plan, Phaen Phatana Sethakit Heang Chat, provided for about 50% of the country to be kept forested, which was the foundation of the National Forest Reserve Act of 1964, the skeletal institution for forest conservation. This structure did not change until 1989.

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1) In this article, except for the Section 7-3, the term ‘forest conservation’ (or just ‘conservation’) means to maintain the forest cover accompanied by reasonable control of commercial logging. In fact, nature conservation aiming to protect natural areas without any human intervention has also been carried out in Thailand since the beginning of 1960s, such as creation of national parks or wildlife sanctuaries. However, the idea of ‘natural conservation’ was minor until the end of the 1980s.
when all commercial logging was banned and forest policy shifted to protection of the natural environment.

The forest cover of about 60% in 1960 decreased to only 25% in 1985 and has changed little since then. In contrast with this, the area designated as National Forest Reserve continued to increase to about 46% of the country in the early 1990s (Fig. 1). A significant part of this gap is due to farmers’ encroachment and clearing, which led to the contradiction that national forest reserves contain large numbers of “illegal encroachers.”

The major explanation for this institutional failure attributes it to the state’s exclusive right to resource exploitation. For example, Vandergeest [1996] views the history of Thai forest management as “territorialization” of the forest by the state. “Territorialization” began with establishment of modern territorial sovereignty and stepped up from control of various forest products and demarcation of forestlands to more functional categorization and utilization in line with natural conditions. None of these policies took into consideration the customary resource usage of local people. The Royal Forest Department (RFD) lacked sufficient power to enact the policies against them, and this was why the institution of forest reserves ended in failure. Anan [2000], based on field research in North, also criticizes state’s enclosure of forest resources, which removed villagers’ incentive to protect the forests. Consequently, these arguments suggest the need for community based forest management.

However, it seems strange that, until the end of 1980s, there has been no obvious
resistance by local people to the institution of national forest reserves or commercial logging concessions, which excluded their customary use from the forest management. Indeed, even during the “students’ revolution” from 1973 to 1976, when mass movements calling for solutions to various social problems were most powerful, the voices demanding distributions of forests, lands, or water resources accounted for just small portion [Praphat 1998:10–27]. The linkage between enclosure of forests as national forest reserves by the government and the lack of incentives to conserve the forests by the local people is not really clear.

I think the above question reflects some aspects of socio-political structure of Thailand. To clarify this point, I shall examine the national forest reserves in detail, including planning, structure, and implementation at the field level, and their influence on local people’s lives. I will focus specially on how the contradiction between the area of national forest reserves and farmers’ encroachment has been dealt with.

In my analysis I employ both national-level information and information I collected in Ubon Ratchathani province in Northeast Thailand. Although unlike the North, the Northeast is not an old center of timber production, and the livelihood and society of local people is also different from the North or other areas, this case study of the process of institution of national forest reserves in Ubon Ratchathani provides useful insights into the actual implementation of the forest management system in Thailand.

II Before the National Forest Reserves

II-1 Institution of National Forest Reserves

Generally, forests in Thailand belong to the nation. In the background of this is the ideological notion that the King owns all of the land in the country, and people are just allowed to use it. In fact, farmers could freely occupy and cultivate the forests without previous usufructs. However, following the introduction of modern land tenure system, the Forest Act of 1941 defined ‘forest’ as ‘the land without any private rights following land laws’ (Article 3). This kind of land, ‘forest’ in the Forest Act, was supposed to belong to the nation (ideologically the King) because no one was legally permitted to use it. Hereafter, this ‘forest’ defined by the Forest Act is referred to as ‘national forestland’.

The forest conservation system in Thailand consists of species control and spatial conservation in forest reserves. Spatial conservation has mainly been provided for by the National Forest Reserve Act of 1964. Following Prime Minister Sarit’s policy revealed at the cabinet meeting on April 1960, investigation and classification of land use and forest demarcation were conducted nationwide. As the result, 280,000 km² was demarcated to be kept forested, and would be designated as forest reserves, pa sanguan, or preserved forests, pa khumkhrong, following the Forest Preservation and Conservation
Act of 1938, Phrarachabanyat Khumkhrong Lae Sanguan Pa, the prototypical institution of national forest reserves discussed below [RFD 1968: 147; 1996: 87]. The first National Economic Development Plan, which began in 1961, recognized the importance of forest resources in economic development and declared 250,000 km$^2$ of forests, about a half of the country, would be conserved [Samnakngan Sapha Phathana Sethakit Haeng Chat 1961: 38; RFD 1968: 144–145]. The demarcation of this 250,000 km$^2$ of forests was roughly finished in 1963, and the lands were designated as ‘permanent forest’, pamai thawon, by cabinet resolutions. Permanent forests were supposed to be designated as forest reserves step by step.

The next section presents a brief history of Thai forest conservation system. In fact, there was a spatial conservation scheme before the national forest reserves, which was instituted by the Forest Preservation and Conservation Act of 1938. However, the national forest reserve system was thought of as an integral part of the economic development program to secure long-term commercial logging by use of scientific forestry. Therefore, in spite of its similar structure of institution, the national forest reserve system has a different character from previous schemes.

II–2 The Beginning of Forest Conservation in Thailand

Commercial logging in Thailand began with teak logging in the North by British companies in the mid-nineteenth Century. Forest was the private property of feudal lords. Problems arose when they gave a logging concession for the same area to several foreign companies. In the era of King Rama V, as part of the administrative centralization, the central government became involved in the management of logging concessions through the Local Governors Act of 1874, Phrarachabanyat Phu Raksa Mueang, and Royal Order on Taxation of Teak and Other Logs, Phraboromarachaongkan Wa Duai Kan Phasi Mai Khon Sak Lae Mai Kraya Loei. In 1896, RFD was founded, and by 1901, forest management had come completely under the control of the central government [RFD 1968: 1–10].

Forest management institutions in the early period were concentrated on teak. Conservation was initiated by the Forest Preservation Order of 1897, Prakat Kan Raksa Pamai, which regulated the size of teak trees to be logged. The Forest Preservation Act of 1913, Phrarachabanyat Raksa Pa, introduced species control not only for teak but also for designated ‘reserved tree species’, mai huang ham, and ‘reserved forest products’, khong pa huang ham. The act also legally defined ‘forest’, and gave a minister, senabodi, the authority to designate non-logging areas and issue orders to prohibit the clearing of forests (Article 5).

In 1916, RFD submitted a draft of the Forest Conservation Act, Phrarachabanyat Sanguan Pa, which was the first attempt to introduce a spatial conservation system. With the prospect of approval of the draft, each Regional Forest Office, pamai phak, began to select forests to be conserved and designated as reserved forests, in the name of admin-
istrative circle\(^2\) governor, *samuha thesaphiban*, or provincial governor. Ultimately, however, this draft was not enacted. But these “temporary” designations of reserved forests continued until 1938, when the Forest Preservation and Conservation Act was enacted, involving a total of 83 forests covering about 700 km\(^2\) [RFD 1996: 61].

However, these “temporary” reserved forests were not effective. Momchao Suepsuksawat Suksawat, former Director General of RFD, reported that from 1917 to 1924, when he was working at the Songkhla Regional Forest Office, which was in charge of forest management in Nakhon Si Thammarat administrative circle, *monthon nakhon si thammarat*, and Pattani administrative circle, *monthon pattani*, he urged the viceroy, *uparat*, of the Southern administrative circle, *monthon phak tai*, and the governor, *samuha thesaphiban*, of Pattani administrative circle to designate reserved forests and order district offices, sub-district heads, *kamnan*, and village headmen to conserve them. But when the Forest Preservation and Conservation Act was enacted in 1938, most of them had been degraded [Mom Chao Suepsuksawat 1976: 97].

II–3  *The Forest Preservation and Conservation Act*

The Forest Preservation and Conservation Act of 1938 provided the first legal framework for spatial conservation. This was structurally the antecedent of the National Forest Reserve Act of 1964, from which it differed in providing for the two categories, ‘preserved forest’, *pa khumkhrong*, and ‘forest reserve’, *pa sanguan*, and with regard to stricter procedures for designation.

This Act consisted of 26 articles in four chapters. After defining terms in Articles 1 to 4, Chapter 1 (Articles 5 to 9) provided for preserved forest, and Chapter 2 (Articles 10 to 21) provided for forest reserve. Chapter 3 was penal regulations.

For designation of forests, a committee was established comprising one member each from the province and district governing the designated forest area, and one from RFD (Article 5). Before designation, the committee would investigate legal land tenure and de facto land use of local people in the area in question, and explain about the boundaries of the preserved forest or forest reserve at a meeting attended by sub-district heads, village headmen, forest or land users, and other people (Article 6, Supplemental Ministry Order (SMO) Article 1-Kho). When a private usufruct was found, the committee would judge whether it was in the public interest for it to continue, and if it were not, compensation would be paid (Article 6, SMO Article 3).

The designation was by Royal Decree, *Phraracha Krisadika*, which was published in the Governmental Gazette, *Rachakitchanubeksa*, and officially announced at the relevant provincial office, district office, and offices of sub-district head (Article 7). The boundary of forest reserves must be marked by posts and signs (Article 10), but preserved forests could use natural markers (Article 7).

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2) Administrative circles were units comprising several provinces, since abolished.
Land occupation, clearing, and firing of forest were prohibited both in preserved forests and forest reserves (Articles 8, 11). For forest reserves, a 'responsible officer', phanakgan chao nathi, was assigned. Logging and extraction of forest products basically required the permission of the responsible officer. The responsible officer also had authority to regulate forest reserves and arrest individuals committing violations (Articles 12, 13, 14). Preserved forests did not have a responsible officer. Lawful logging and extraction of forest products could be conducted (Article 8).

As a unit regularly staying within the forests for control and policing, the 'forest ranger' service, pamai khwaeng, was established in 1952. However, forest rangers were not assigned to preserved forests or forest reserves, but were established in areas of commercial logging concessions, and policed them and surrounding national forests generally. Later on, forest rangers transformed to 'forest protection units', nuai pongkan raksa pa, which began to be established in 1961 under the first National Economic Development Plan [ARRFD 1966: 52–53; 1967: 58–60].

Besides this, other forest officers, policemen, and local administration officers ranked above 'vice-district head', palat amphoe, generally had authority to police the forests and arrest those in breach of forest laws.3)

II–4 From the Forest Preservation and Conservation Act to the National Forest Reserve Act
The Forest Preservation and Conservation Act was revised twice, in 1953 and 1954. The 1953 revision stipulated that the designation committee must contain the sub-district head as a member (2nd edition Article 3), and that temporary residence and usufruct within preserved forests and forest reserves might be permitted (2nd edition Articles 4, 5). The major revision in 1954 was the change from designation by Royal Decree to Ministerial Order, kot krasuang (3rd edition Articles 5, 6).

Designation of preserved forests and forest reserves was slow: 240 preserved forests covered 33,538.6 km² and 8 forest reserves covered 484.98 km² in 1954 [ARRFD 1954: 33] expanded to only 33,980.05 km² and 13,890.08 km² respectively in 1962, just before the introduction of the national forest reserve system [ARRFD 1962: 42]. The annual report of RFD in 1952 said that the policy of designation in two steps had been changed to one-step designation of forest reserves so as to save labor and money, though the designation might be slower [ARRFD 1952: 136].

The 'Five-year Plan for Forestry Renovation', khromkan prapprung kiitchakam pamai ha pi, which the Ministry of Agriculture submitted to the cabinet in 1952, proposed conservation of 270,000 km² of forests, about a half of the country. But the budget allocation was not enough [loc. cit.]. As a result, the designation of preserved forests and forest reserves was inevitably slow.

3) Policemen and local administration officers ranked above vice-district head had authority to arrest anyone in breach of the law, not limited to forest laws.
Apart from budget allocation, strict procedure for designation under the Forest Preservation and Conservation Act needed too much time to allow on-going deforestation to be dealt with effectively [RFD 1968: 165]. The National Forest Reserve Act was enacted in 1964. This new institution omitted the mandatory investigation of usufructs prior to the designation, which was mandated in Forest Preservation and Conservation Act. This resulted in rapid acceleration of designation.

III National Forest Reserve Act: Structure of the Institution

III-1 Designation
This section examines the institutional structure of national forest reserves stipulated by the National Forest Reserve Act. The Act, legislated in 1964, first defines the terms, then has chapters on designation, management, penalty, and temporary measures.

Designation of national forest reserves is provided for as follows. First, forest reserves under the Forest Preservation and Conservation Act are automatically converted to national forest reserves. Designation of preserved forests or other forests as national forest reserves must be done by Ministerial Order, which will be published in the Governmental Gazette (Article 6). Revision of boundaries or abolition of national forest reserves also follows the same procedure.

After the Ministerial Order, the boundary is clearly marked by poles and signs, and the designation is publicly announced at district offices, offices of sub-district heads, and each village concerned (Articles 8, 9). Then, a 'national forest reserve committee', khana kamakan pa sanguan haeng chat, is established for each forest. The committee consists of one member each from RFD, the Department of Local Administration, and the Department of Land, and two members chosen by the Minister of Agriculture (Article 10).

Those who claim de facto land occupation or usufruct can appeal to the district head or vice-head within 90 days after the designation. The appeal will be sent to the national forest reserve committee for examination (Article 12). When the applicant is not satisfied with the committee’s judgment, further appeal can be made to the Minister, whose judgment will be final (Article 13). Rights under the Land Code will be preserved in perpetuity (Article 12).

Under the new act, the prior investigation of local people’s land use is omitted. Only a geographical survey is required for designation, and the protection of local people’s rights or usufructs is postponed until after the designation. However, the Act provides

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4) RFD has belonged to the ministry in charge of the agricultural sector since 1935. The composition and name of this ministry has changed several times (in detail, see Tamada [1996]). In this paper, except when referring to names of official documents, I use the simple designations ‘Ministry of Agriculture’ and ‘Minister of Agriculture’, regardless of the official name at the time.
only for monetary compensation (Article 13). As shown later, administration sectors can take various measures to protect local people's livelihood. But, institutionally, this system has the potential to destroy the livelihood of local people.

III-2 Regulations

As the regulations related to national forest reserves, Article 14 principally prohibits such activities as land occupation, residence, firing, logging, and extraction of forest products except as permitted by forest laws. Articles 15 to 20 provide about permissions. Certain details have subsequently been revised in line with changes in forest policy, but the essential framework has been maintained.

Any utilization of national forest reserve must be permitted by RFD, Ministry of Agriculture, or ‘responsible officers’ (shown later). The authority and procedure for permission differ depending on the use. Applications for permission for uses related to local people’s life, such as extraction of forest products, utilization of forest land, or residence are accepted at district forest offices and sent to the headquarters by way of provincial forest offices, then decided by the director-general of the department.

III-3 Relation to the Forest Act

The above regulations related to national forest reserves partially overlap with regulations of the Forest Act of 1941. Most forest officers recognize that the National Forest Reserve Act focuses on ‘land’, whereas the Forest Act mainly targets timber trees or forest products. It is true that, in general, the former is oriented to spatial conservation and the latter to species control. However, the Forest Act also contains provisions that regulate forestlands spatially.

The Forest Act of 1941 has been revised several times, but its principle framework remains intact. It first defines ‘forest’ as ‘land with no right-holders’, then provides regulations covering activities in ‘forest’ and the formats of permission; it prohibits such activities as logging preserved species of timber, *mai huang ham*, extracting forest products, *khong pa huang ham*, firing, and land occupation.

As the definition of ‘forest’ in the National Forest Reserve Act (Article 4) follows that of the Forest Act, all national forest reserves must be ‘forest’ under the Forest Act. Therefore, if the regulations of the National Forest Reserve Act are not substantially different from those of the Forest Act, the national forest reserves are of no substantial meaning. Indeed, the only clear difference between the two is that the Forest Act regulates only ‘preserved species’ of timber or forest products, whereas the National Forest Reserve Act regulates all kinds of things in the national forest reserves. Another

5) Besides this purely institutional consideration, national forest reserves were actually based on ‘permanent forests’, which were demarcated from national forestlands, namely, the ‘forests’ in the Forest Act.
point is that the Forest Act once allowed firing and clearing of forests that have been fallowed for less than 10 years (Article 54). This was shortened to 5 years in the second edition in 1951, and abolished in the fourth edition in 1960. Thus the difference in regulations between the two is small, which is exemplified by the fact that, whereas 24 cases regarding the National Forest Reserve Act are found in a casebook of the Supreme Court on forest laws from 1979 to 1981 [RFD 1981], there is only 1 criminal case regarding breach of solely the National Forest Reserve Act.

In addition, as shown in the next section, the national forest reserves do not have their own policing system. Designation of national forest reserves might have the effect of clarifying and fixing the boundaries of forestlands. However, inasmuch as it overlaps the Forest Act in aiming to achieve substantial forest conservation, the raison d'être of the National Forest Reserve Act is, at least institutionally, questionable.

III-4 Control and Policing

After the designation of national forest reserves, 'responsible officers', phanakngan chao nathí, were appointed by the Minister of Agriculture for each forest and their names were published in the Governmental Gazette. Usually, responsible officers consist of the provincial governor, the director of the regional forest office, and district heads. The responsible officers are in charge of management and conservation of each national forest reserve. They are authorized to force those who are engaged in illegal activities to leave the forest, to halt or correct illegal activities, and to take necessary measures in case of emergency (Article 25), as well as to give permission for utilization.

However, these responsible officers are all high-ranking. They are not engaged in actual conservation activities. Thus, the National Forest Reserve Act provides no substantial measures for policing, such as establishing on-site organs particularly for national forest reserves. In the same way as in the previous institution, other forest officers, policemen, and local administration officers ranked above vice-district head generally have the authority to police and arrest those breaking the forest laws. Among them, 'forest protection units', nuai pongkan raksa pa, have played a central role. The forest protection units, however, are in charge of policing national forestlands, not only national forest reserves, in the same way as the previous forest rangers.

III-5 Structural Factors of the Contradiction

Within the institutional structure of the national forest reserve system are to be found

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6) RFD compiled cases involving forest laws, both criminal and civil, only during this period. The reason why this period was chosen is not clear. A significant portion of national forest reserves had already been designated by the start of this period.

7) Sato reports field-level forest officers do not clearly recognize boundaries, and this becomes a cause of friction with local people [Sato 2002: 127].
the causes of the contradiction that a large part of national forest reserves has been cleared and become farmland. Local people's usufruct is not investigated before land is designated as a national forest reserve. On the assumption that such a designated area might contain considerable de facto residences and area of cultivation, certain special measures to realize the institution must have been taken. For example, if it was intended to neglect any customary rights or resource usage by local people, huge power must have been exerted to enforce “modern” system effectively. Otherwise, such an unrealistic institution must have been modified in line with the local situation. But the Act provided only for compensation upon application within 90 days of designation. As a result, most local people residing on and cultivating forestland before its designation as a national forest reserve became “illegal encroachers” and were left as such. This also made it difficult to distinguish “older residents” and “newcomers” who entered national forest reserves after their designations.

Another question is whether the institution of national forest reserve is really a “territorialization” of forest that excludes local people, as Vandergeest [1996] suggests. The rule of compensation for de facto usufructs upon application within 90 days might act to exclude local people. But the Forest Act had prohibited new clearing of national forestlands since 1941, and existing land occupation had been authorized by land titles called ‘So Ko’ or ‘No So’ following the Land Code, Pramuan Kotmai Thidin, since 1957. Therefore, logically, legal, or not illegal, usufructs would not be seized. The Act also provided that local people could utilize timber and other forest products in national forest reserves with the permission of a responsible officer. It is more proper to think of the institution of national forest reserves as an attempt to officially grasp and control the forest resource usage, but not necessarily to seize the resources from local people.

Of course, in reality, many local people did not know about the laws or did not follow the legal procedures because they lived far from a district office. It is also true that official applications for resource use by local people took a long time to be processed or were difficult to get accepted, and such schemes tended to be utilized for resource exploitation by outside businessmen.

IV Administration of the National Forest Reserves

IV–1 Expansion of Designated Forest Reserves
Following the enactment of the National Forest Reserve Act in 1964, the designation of national forest reserves accelerated compared to the previous designation of forest reserves and preserved forests (Fig. 1). On the other hand, deforestation was also rapid. The contradiction between national forest reserves and actual forests increased. This section will focus on the implementation of national forest reserve system. Faced with forest degradation, how did forest officers behave, especially those at field-level, and
what measures did they take within the limits of their institutions?

Designation of national forest reserves began soon after the Act was enacted and progressed smoothly. As well as the previous forest reserves, which automatically converted to national forest reserves, and preserved forests, which needed implemental procedures, there were many areas under measurement and investigation. Demarcation of 'permanent forests' began in 1960, and roughly finished in 1963. Permanent forests were to be designated as national forest reserves from 1964. Designation of national forest reserves continued until the end of the 1980s.

A forest officer who has been working for Ubon Ratchathani Regional Forest Office, samnakngan pamai khet Ubon Ratchathani, which was responsible for preparatory procedures for designation, and had been engaged in the designation of national forest reserves, reports that they made annual plan of designation following the budget allocated by the headquarters. They measured the estimated area and drew a map. All results were sent to the headquarters. The headquarters seldom made amendments and just sent to the Ministry which automatically issued Ministerial Order of designation.

As the headquarters ordered the designation of all permanent forests as national forest reserves to be completed within five years from 1964, the local officers tried to finish their measurements as quickly as possible. When they measured a planned area, they surveyed only along the boundary with assistance of village headmen and sub-district heads. Border areas that were dangerous and difficult of access might have been demarcated only on the map. Large and well-established villages and their paddy fields would be excluded if forest officers found them during their survey. But small hamlets of several households would not be excluded from the national forest reserves, even though forest officers found them, because, according to the previous officer, exclusion of these hamlets from national forest reserves would mean approving earlier illegal encroachment into national forestlands. Furthermore, paddy fields in Northeast Thailand often contain trees remaining from the original forest. Such paddy fields were sometimes recognized as 'forests'. The mixed usage of land for agriculture and forests in Northeast Thailand could not properly be estimated by the "modern" system, which clearly distinguished forest and farmland.

The designation of national forest reserves thus sometimes enclosed recognized villages and farmlands. The maps attached to the Governmental Gazette showing villages inside the designated national forest reserves also testifies to this. The forest officers must have thought the contradiction between national forest reserves and

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8) The officers thought smaller hamlets signified newly cleared areas that had been occupied after the Forest Act of 1941.

9) Takaya and Tomosugi [1972] revealed the existence of vague boundaries between forest and farmland in rain-fed paddy cultivation in this area, and named such ambiguous land "rice-producing forest."
existing villages could be resolved later and given priority to rapid designation. Local people also did not apply for ex post facto measures. In this way, the contradiction was left.

IV-2 Management of National Forest Reserves and Its Relation to Local People
The objective of national forest reserves is not only to conserve trees but also to manage the land itself so as to secure regeneration of forests. But, in fact, almost no management activities were carried out after designation. Illegal encroachment into national forest reserves might have become a problem and attracted the attention of RFD only when logging, plantation, construction, or other projects were planned on the land in question. It is also true that there was never enough available manpower to allow substantial control and management of wide area of national forest reserves. Peasants continued to clear the forests with little intervention from the state, following the customary idea of ‘occupancy’, chap chong, or ‘first come, first served’ in Northeast cases. In this idea, legal status of the land makes little sense. Only visible entities such as individuals or village communities can be actors. As the result, the contradiction expanded.

On the other hand, RFD began to take action to respect local customary land and forest usage. A committee was established in 1966 to investigate local people’s de facto land use in proposed national forest reserves. In 1967, this investigation expanded to already designated national forest reserves [ARRFD 1966; 1967]. But the illegal status of these “discovered” residences were not improved and any institutional amendments were not done based on the results of investigation.

Nevertheless, the investigation of de facto usufructs by local people continued. In addition to RFD’s own investigation, the ‘land distribution promotion project’, khrongkan renrat chat thidin, of the Ministry of Interior, investigated land tenure and usage in national forest reserves in 1973, practically conducted by RFD. This investigation considered how to deal with “illegal” encroachers. The result was examined by a subcommittee consisting of the permanent secretary of Ministry of Agriculture, the director-general of the Department of Agricultural Promotion, the director-general of the Department of Public Welfare, and the director-general of RFD. In each case, the subcommittee chose from the following four measures: 1) exclude the occupied area from national forest reserve, 2) temporarily allow residence and cultivation, 3) remove the encroacher, 4) abolish the whole area of a national forest reserve. The judgments made in 1973 concerning about 760 km² occupied by 28,806 persons in 66 national forest reserves are shown in Table 1 [ARRFD 1973: 28–30]. In most cases, temporary residence and cultivation was allowed. This meant continuation of the illegal status. The National Forest Reserve Act of 1964 provided for permission for temporary utilization (Article 16).

10) According to interviews with several ranking forest officers.
But this regulation was not applied in 1973. Investigation of de facto usufructs in national forest reserves continued until the 1990s, though the number of forests investigated each year varied from a handful to 50 or 60 forests [ARRFD 1996 to 1991].

From the mid-1970s, some schemes were devised to recognize or distribute cultivation rights in national forestlands (as shown in Section 6). However, these schemes did not utilize the results of previous investigations shown above. Therefore, this investigation’s results since the 1960s were not utilized at all. Each scheme carried out an investigation of its own. As a result, the actual situation was just confirmed each time, regardless of whether cultivation was legal or illegal, whether it began before the national forest reserve was designated or after.

Besides land tenure, measures were also taken for the convenience of local people’s daily usage of forest resources. The provincial governor, as a ‘responsible officer’ of national forest reserves in the province, gave permission for certain forest products to be extracted without application. For example, in 1972 the governor of Surin province publicly announced a list of species that were permitted to be extracted in each district. The announcement said that it followed a letter of instruction from RFD [UPD 1]. The head of the legal affairs division of RFD calls this ‘general permission’, *arıwat thuapai*, and reports that each provincial governor decided on about this permission. However, as in Surin province, RFD probably instructed each province to consider this issue. In fact, RFD had given the same kind of instructions to provincial governors during the time of the Forest Preservation and Conservation Act [UPD 2; 3].

Strictly, this kind of general permission might be interpreted as not following the due process of the National Forest Reserve Act, which required application from those wishing to utilize the forest. But local people depended on the resources in the national forest reserves, which lacked a substantial management system. Therefore, the adminis-

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**Table 1** Result of Investigation of Land Usage in National Forest Reserves (NFR) in 1973 (for 66 forests, 760 km² occupied by 28,806 persons)

<table>
<thead>
<tr>
<th>Judgement of Subcommittee</th>
<th>Area: (km²)*</th>
<th>Number of Occupants (persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding legal title</td>
<td>66</td>
<td>1,693</td>
</tr>
<tr>
<td>No legal title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>696</td>
<td>27,113</td>
</tr>
<tr>
<td>Exclude occupied lands from NFR</td>
<td>18</td>
<td>839</td>
</tr>
<tr>
<td>Allow temporary residence and cultivation</td>
<td>583</td>
<td>19,410</td>
</tr>
<tr>
<td>Remove people from NFR</td>
<td>4</td>
<td>637</td>
</tr>
<tr>
<td>Resettle people from NFR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>under a scheme of the Department of Public</td>
<td>0.04</td>
<td>9</td>
</tr>
<tr>
<td>Abolish NFR</td>
<td>1</td>
<td>143</td>
</tr>
</tbody>
</table>

Source: [ARRFD 1973: 28–30]

*Area is calculated from the original data in rai (= 1,600 m²), thus all numbers are approximate values.

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trative section made an effort to adjust the rules to the actual situations. But it is not clear to which extent these administrative efforts contributed to local people's livelihood, as most local people I have interviewed in Northeast do not know anything about these policies. They just continued to live their daily lives with little intervention by forest officers.

IV/4 Forest Protection Units and Policing the Forests

The institution of national forest reserves did not have its own policing system provided by the Act. Forest protection units were established in rural areas for policing national forests, which included national forest reserves. The Forest Police was also founded as a division of the Police Department in 1960 to assist in policing the forests [RFD 1996: 91]. Later, in the 1980s, RFD also established ‘policing and patrolling lines’, *sai taruat prap-pram*, and ‘forest encroachment and destruction prevention centers’, *sun chapho kit pongkan kan bukruk thamlai pa*, to support forest protection units. However, these organs were usually located in Bangkok or a provincial town and went to the forest to help in case of necessity. Thus, forest protection units were the sole organ stationed regularly in rural areas near the forests.

As noted above, forest officers other than members of forest protection units, namely, policemen and local administration officers ranked above vice-district head, generally have authority to police forests and enforce forest laws. However, except in serious, large-scale cases, for example, in dealing with well-organized illegal logging groups armed with guns, daily policing activities have been in the hands of forest protection units.

Forest protection units were under the control of regional forest offices from the time of their establishment in 1961 until they were transferred to provincial forest offices in 1992. The officers regularly police the forests under their control. When they find illegal activities, they arrest the offenders and seize illegal logs, forest products or equipment. Arrested offenders are sent to ‘local police stations’, *tamruat phuthon*, and prosecuted following criminal procedure.

Following the establishment of forest protection units in 1961, ‘rural forest development units’, *nuai phatana chonnabot pamai*, began to be established in 1965. Rural forest development units played almost the same role as forest protection units, except that they were also expected to function as forest extension units and they were established in relatively less forested area. Eighty-two forest protection units and 8 rural forest development units were established in 1967, 220 and 8 respectively in 1974, and 232 altogether in 1984 [*ARRFD* 1967: 61; 1984: 19]. Thereafter, no references to rural forest development units appear in governmental documents or records. They have probably been integrated into forest protection units. In 1989, when commercial logging was stopped in the whole country, 243 units existed [*ARRFD* 1988: 39–40]. It was planned in 1961 that 650 units would be established, which was modified to 336 in the latter phase of
3rd National Economic and Social Development Plan between 1972 and 1976 [ARRFD 1984: 20]. Forest protection units were established for logging areas called ‘project forests’, pa khrongkan. The total of 336 units represented 1 unit for each project forest. But only about two-thirds of this number had been realized by 1989. After commercial logging was stopped, 126 units were established in 1989 and 122 more in 1990 for the purpose of controlling abolished logging areas [ARRFD 1989: 39-40].

In 1984, 232 units controlled 180,000 km², about 776 km² per unit [ARRFD 1984: 19]. Only five to six officers were working for one unit. Many of them are temporary workers recruited from surrounding villages. In former days, they had to patrol on foot. The conditions for policing were far from satisfied.

Many forest officers who have worked for forest protection units criticized the state forest policy for not addressing the situation that peasants needed to expand farmland. They had to confront such local people. Forest officers were kidnapped and ransomed in exchange for arrested loggers, and the offices of forest protection units were attacked when the officers confiscated equipment used for illegal logging. They also suffered from attacks by communist groups. But the officers dealt with illegal logging or clearing in the forests faithfully following the laws. In fact, they personally felt that they did not want to arrest their fellow countrymen as far as possible. In some cases, they did not arrest peasants clearing forests, only warned them. Another officer reports that his unit has overlooked slight breaches that did not cause serious damage, such as extraction of small amounts of timber for house repair or dead trees for timber or making charcoal. He says about a half of the offences subject to arrest were overlooked, and emphasizes that they could not stay there if they arrested offenders for every little breach. They have been playing a role balancing local people’s dependence upon the forests for their livelihood with regulations, even “illegally” overlooking regulations at their own discretion.

Local people in many villages in Ubon Ratchathani report that forest officers’ policing was not a substantial obstacle to their subsistence activities. Even those who were engaged in illegal logging did not fear forest officers, as they were rarely arrested. As well as the field level officers overlooking local people’s usage of forest resources necessary for daily life, they could capture just small portion of illegal logging for sale, which were to be strictly policed.

V National Forest Reserves for Commercial Logging Concessions?

V-1 National Forest Reserves and Commercial Logging Concessions
As shown so far, national forest reserves have been structurally inconsistent with the actual situation of local people’s need to utilize the forests. In addition, few institutional adjustments or efforts to enforce the regulations have been made. National forest
reserves have been simply demarcated "on the map." So, the question arises of why the system of national forest reserves, which could not achieve substantial forest conservation, has been maintained.

Various classes of forest officers explain the real purpose of national forest reserves was to secure commercial logging. Commercial logging concessions in Thailand had been given since long before the introduction of the national forest reserve system. After several amendments of regulations, 30-year concessions began to be given in 1968 by cabinet resolution and were maintained until 1989 [RFD 1976a: 17, 26–27]. The 30-year concessions covered a wider area per unit than before, when designated compartments were logged under an annual plan. As mentioned above, this notion of sustainable timber production was a part of the first National Economic Development Plan from 1961.

National forest reserves, as forest officers explain, were expected to spatially enclose the forestlands.

Logging in national forestlands, whether national forest reserves or not, principally needs permission from the government. From 1967, RFD began to designate certain areas as ‘project forest’, pa khrongkan, depending on the conditions of the forests, and logging permission, such as a commercial logging concession, sampathan, and small-scale logging permission for local people’s own consumption, was given for each project forest. Project forests were numbered in each province. Commercial logging concessions were given almost exclusively to ‘provincial forestry companies’, which were established in each province, although a small portion was given to the Forest Industry Organization (FIO), ongkan utsahakam pamai, a public corporation, and some other governmental organizations [RFD 1976a: 17, 26–27].

For example, in Ubon Ratchathani province, concessions for FIO began to be given in 1972, and the provincial forestry company in 1973, when the company was formally established [RFD 1978]. Twenty-one project forests covering 7,763.93 km² were designated in Ubon Ratchathani province, of which 13 covering 5,652.43 km² were for commercial logging [ibid.]. Of 13 project forests for commercial logging, concessions for 10 forests were given to the provincial forestry company, 2 to FIO, and rest one to Army Veterans Welfare Organization, ongkan songkhro thahan phan suek.11

Later, when the Kriangsak government, formed after the coup of 1977, reinforced the forest conservation policy, some concessions were reconsidered. Following discussions in special committees, the cabinet resolved that 341 concessions covering 122,827.31 km²

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11) One more project forest, numbered OB 24, had been planned in Det Udom district in the southern part of the province. But in 1973, RFD decided that the area of OB 24, in which the forest had mostly been destroyed, would be excluded from national forestlands. Ubon Ratchathani Regional Forest Office also reported to the headquarters that because the boundary of the project forest was not clear, OB 24 should be abolished [UPD 4: 5: 8]. Thereafter, OB 24 has never been referred to in any other official documents and can be assumed to have been abolished.
nationwide would be temporarily suspended\(^{12}\) [RFD 1980: 216–218].

In Ubon Ratchathani province, four concessions were suspended. Although the Cabinet resolution was for temporary stoppage these four have never been resumed. Two (OB1, OB9) were in Khemarat district in the northeast of the province, one (OB3) was in Det Udom, and one was in Phibun Mansahan in the southeast [UPD 6; 7]. Thereafter until 1989, there was no change in the number of concessions.

Generally, FIO had a 20% share in the provincial forestry company, major wood industry companies in the province held 50%, and the citizens of the province 30%. Actually, the provincial forestry companies were dummies, being congeries of logging companies who were big shareholders. Logging concessions for project forests were distributed according to the number of sawmills each logging company had. An increase in number of sawmills had been prohibited since 1960 [RFD 1968: 147]. Thus, establishment of provincial forestry companies since 1967 and the giving of logging concessions exclusively to them was an attempt to organize logging companies. Nevertheless, there were changes in ownership of shares through the purchase of existing sawmills packaged with shares of provincial forestry companies and allocation of logging concessions areas (project forest)\(^{13}\).

For example, in Ubon Ratchathani province, T. H. Company, which had been the biggest logging company in the province having almost a monopoly, withdrew from logging in 1976 and sold all of its sawmills to other companies, accompanied by a transfer of “territory,” its logging concession areas. After this transfer, the project forests for commercial logging in Ubon Ratchathani province were divided among three major logging companies: T. S. Company, whose most important sawmill was in Det Udom district, and which held the territory in the southern part of the province; P. Company, whose most important sawmill was in Phibun Mansahan district, and which held the territory in the eastern part; and I. H. Company, whose most important sawmill was in Yasothon province, and which held the territory in the northern part (Table 2). All of them owned several sawmills managed as a family business, though each sawmill might be registered as an individual company. Except when I. H. Company’s breaches of concession regulations were exposed, which damaged the company’s business, this division did not change until 1989.\(^{14}\)

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12) In 1977, ‘National Forest Destruction Prevention Committee’, khana kamakan pongkan kaebkul panha kan bukruk thamlai pamai khong chat, was established. The committee suggested policy amendments, which included reinforcing control of logging concessions [RFD 1980: 189–190, 216]. In 1978, the Forestry Policy Committee, khana kamakan kamnot nayobai kiao kap kan tham mai, was established, which submitted a plan for improvement of concessions. Cabinet meeting in 1979 approved this plan, so that some concessions were temporarily suspended [ibid.: 216–218].

13) Interview with previous owner of logging company.

14) Interviews with officers in Ubon Ratchathani Regional Forest Office and a sawmill owner.
<table>
<thead>
<tr>
<th>No. and Name of Project Forest</th>
<th>District (Part of Province)</th>
<th>Area: km²</th>
<th>Estimated Annual Production: m³</th>
<th>Actual Distribution: Company Name (Place of Base Sawmill)</th>
<th>Concession Holder</th>
</tr>
</thead>
<tbody>
<tr>
<td>OB 1 Dong Khum Kham</td>
<td>Khemarat, Trakan Phuet Phon (N)</td>
<td>375.8</td>
<td>81,394.68</td>
<td>I. H. (Yasothon)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 2 Fang Sai Lam Dom Yai</td>
<td>Nam Yuen (S)</td>
<td>363.58</td>
<td>113,812.94</td>
<td>T. S. (Det Udom)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 3 Fang Sai–Fang Khwa Lam Dom</td>
<td>Det Udom (S)</td>
<td>517.62</td>
<td>149,417.76</td>
<td>T. S. (Det Udom)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 4 Fang Khwa Lam Dom Noi</td>
<td>Buntharik (S)</td>
<td>522.28</td>
<td>373,487.83</td>
<td>T. S. (Det Udom)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 5 Fang Khwa–Fang Sai Lam Dom</td>
<td>Buntharik (S)</td>
<td>441.79</td>
<td>462,648.53</td>
<td>T. S. (Det Udom)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 6 Phu Lon</td>
<td>Si Mueang Mai (E)</td>
<td>577.3</td>
<td>41,282.96</td>
<td>P. (Phibun Manhasan)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 7 Phu Lon–Huai Na Bua</td>
<td>Khong Chiam (E)</td>
<td>477.7</td>
<td>50,673.27</td>
<td>P. (Phibun Manhasan)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 8 Huai Ta Wang–Dong Chum Kha–Dong Ta Wang</td>
<td>Khemarat (N)</td>
<td>475.7</td>
<td>37,374.03</td>
<td>Thai Plywood Company*</td>
<td>Thai Plywood Company</td>
</tr>
<tr>
<td>OB 9 Dong Kham Dueai Fang Khwa Huai Thom</td>
<td>Chanuman, Khemarat (N)</td>
<td>685.75</td>
<td>103,685.40</td>
<td>I. H. (Yasothon)</td>
<td>Forestry Industry Organization</td>
</tr>
<tr>
<td>OB 10 Dong Bang 1–Dong Hua Kong</td>
<td>Amnatt Charoen (N)</td>
<td>311.83</td>
<td>147,978.18</td>
<td>I. H. (Yasothon)</td>
<td>Forestry Industry Organization</td>
</tr>
<tr>
<td>OB 21 Dong Kham Dueai</td>
<td>Chanuman (N)</td>
<td>184.04</td>
<td>14,284.45</td>
<td>I. H. (Yasothon)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 22 Huai Yot Mon–Chong Mek</td>
<td>Phibun Mangsahan (E)</td>
<td>338.64</td>
<td>123,409.90</td>
<td>P. (Phibun Manhasan)</td>
<td>Provincial Forestry Company</td>
</tr>
<tr>
<td>OB 23 Dom Yai</td>
<td>Det Udom (S)</td>
<td>380.4</td>
<td>226,703.45</td>
<td>Army Veterans Welfare Organization**</td>
<td>Army Veterans Welfare Organization</td>
</tr>
</tbody>
</table>

Source: Interview with forest officers and the owner of a sawmill [RFD 1978]
* Thai Plywood Company is a semi-governmental company.
** Army Veterans Welfare Organization cut logs by itself and sold to sawmills.
A retired executive forest officer explained that the policy of organizing existing logging companies into provincial forestry companies and giving long-term logging concessions exclusively to them aimed at ensuring that logging sites would be protected and reforested by the logging companies as provided by the concession regulations so that forestlands would be managed sustainably.

Project forests were under the control of regional forest offices. Forest officers participated in selecting and marking the trees that would be cut every year following the concession regulations. In addition, forest officers inspected logging sites monthly. In spite of this system, however, logging companies breached the regulations: for example, they did not reforest abandoned forests, which led to forest degradation and allowed peasants to cultivate the land.\textsuperscript{15}

V–2 National Forest Reserves and the Area of Commercial Logging

As shown above, RFD controlled logging concessions with, to some extent, substantial regulations, even though there were still breaches of regulations and forest destruction could not be prevented. National forest reserves were expected to support this logging system. But national forest reserves were not really linked to project forests for commercial logging.

As country-level data, 'Statistical Accounts of a Variety of Project Forests in Thailand' [RFD 1976b] shows the area of project forests in each province in 1976 classified into commercial logging concessions and others. On the other hand, the 'List of National Forest Reserves' [RFD 2000] shows all designations, changes and abolishments based on the Governmental Gazette until 2000. Calculating the area of national forest reserves in each province in 1976 and comparing it with the area of project forests for commercial logging can show a large difference in the ratio of the two in each province: for example, in some provinces, the area of national forest reserves was less than 20\% of the area of project forests for commercial logging; in other provinces, the area of national forest reserves was four times larger than that of project forests for commercial logging, although it is not clear how much these areas overlapped with each other. No clear regional tendencies were found, except that all provinces in the north had smaller areas of national forest reserves than project forests for commercial logging.

For Ubon Ratchathani province, there is a map showing all project forests in the province [UPD 9]. Comparing this with maps of national forest reserves in the Governmental Gazette shows that a large part of project forests were designated as national forest reserves. Because national forest reserves were designated from the 1960s to the

\textsuperscript{15} After the logging ban in 1989, logging companies nationwide sued RFD for lost interest caused by the repeal of concessions, namely, nonfulfillment of contracts, but the companies failed in 2001. Then, RFD sued the companies for the damage caused by breaches of concession regulations in 2001 (still in court).
1980s, those designated in 1980s, when a large areas of project forests were encroached by peasants, have contributed little to securing commercial logging. Besides the core areas of commercial logging in the southern and eastern parts of the province, small plots of project forest were scattered all over the province, most of which were designated as national forest reserves. Because project forests, as well as national forest reserves, were designated in permanent forests demarcated in the 1960s, this overlap is natural. But in the core areas in the southern and eastern parts of the province, especially along the borders with Laos and Cambodia, where most project forests and national forest reserves were situated, the areas and boundaries of project forests and national forest reserves did not coincide with each other. Some portion of project forests has never been designated as national forest reserves, and vice versa.

According to forest officers who have worked in designation of national forest reserves, an annual working plan to designate permanent forests as national forest reserves was drawn up each year following budget allocation, without any consideration for accord with project forests. Both designation of national forest reserves and management of logging concessions were under the control of the forest management section of regional forest office. But each task was carried out separately without cooperation or communication between the offices concerned. Annual budget allocation also restricted the area designated in a year, and made it difficult to designate a large plot of forest.

V–3 *Project Forests for Commercial Logging and Forest Protection Units*

In the same way as national forest reserves, the main objective of forest protection units was also to secure commercial logging by policing the forestlands, though the task included policing all national forests, not only logging sites. As already mentioned, only 243 units had been established in 1989. In 1960, 650 units had been planned, and this was modified to 336 units in the 1970s. The plan of 336 units tended to establish one unit per project forest. Forest protection units were also numbered just as project forests.

*Statistical Accounts of a Variety of Project Forests in Thailand* [RFD 1976b], referred to above, also shows the number of forest protection units in each province in 1976, when 220 units nationwide, about 90% of the 1989 total, had already been established. The area of project forests and national forest reserves per forest protection unit varied widely by province\(^{16}\); except for one exceptionally high value (Kanchanaburi province), in some provinces, zero per unit (i.e., forest protection units were established even though there were no national forest reserves and project forests for commercial logging), while in the other provinces, 6,000 km\(^2\) national forest reserves, and 4,000 km\(^2\) project forests for commercial logging per unit. No significant regional tendencies are evident.

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\(^{16}\) This is simply the result of dividing the area of project forests and national forest reserves by the number of forest protection units, and does not mean officially controlled area by each unit.
In Ubon Ratchathani province, according to forest officers, the first units were established in 1969, unit ‘OB 14’ in the current Chong Mek district, for policing project forest OB 22, and unit ‘OB 15’ in the current Thung Si Udom district, for policing project forests OB 2, 3, 4, 5.17 In 1972, two additional units were established, namely, unit ‘OB 2’ in Khemarat district for policing project forest OB 20, and unit ‘OB 1’ in Amnat Charoen district (current Mueang district, Amnat Charoen province) for policing project forest OB 21. No more units were established until 1989.

Limited numbers of units were assigned to cover important commercial logging areas. RFD made efforts to some extent to conserve forests effectively. Nevertheless, four units were far from sufficient even for conservation of only commercial logging sites. In the southern part of the province, peasants brought a large portion of the project forest under cultivation in the mid-1980s. Therefore, the logging company had to purchase trees in farmlands, which were actually within project forests.18)

National forest reserves “on the map” without sufficient policing system could not secure even commercial logging sites.

VI Attempts to Diminish the Contradiction

VI-1 Confirmation of Peasants’ Cultivation in National Forest Reserves
As shown so far, national forest reserves had been demarcated but lacked a substantial forest conservation system. As a result, there were many “illegal encroachers,” including the residents enclosed into national forest reserves and those who entered and cultivated national forest reserves after the designation. RFD was not indifferent to this contradiction. Residence and land utilization in national forest reserves, as already mentioned, had been under investigation since 1966, just after the introduction of the national forest reserve system, and this continued until the 1990s. But this investigation did not lead to any systematic amendment, or drastic re-demarcation of national forest reserves.

However, in the mid-1970s, facing strong political pressure to recognize cultivation rights in national forest reserves, RFD took several measures to guarantee cultivation rights in degraded forestlands that had actually been converted to farmlands. These measures repeatedly ignored past illegalities.

VI-2 Cabinet Resolution in 1975 and ‘Forest Village’ Project
In 1975, the government began to try to solve the contradiction of de facto residence and

17) According to annual reports of RFD, one unit was established in 1967, and two units in Phibun Mansahan and Det Udom districts (OB 14 and 15 respectively) were established in 1968. These two units were recorded as rural forest development units [ARRFD 1967: 60; 1968: 95]. Later, they appeared among forest protection units in all official documents.
18) Interviews with previous owner and workers of logging company.
cultivation in national forest reserves by means of giving cultivation rights within national forest reserves. During the period between the "students' revolution" of 1973 and the reactionary coup of 1976, the political atmosphere was democratic. Popular movements were active. Many demanded reduction of tenant rents or complained about high-interest loans [Murashima 1980; Praphat 1998: 12–20]. But there was also demand for land allocation by landless farmers [RFD 1976a: 35–36]. In this period, attacks on forest officers who tried to arrest offenders were often and strong [ibid.: 31, 39]. The government's policy also became populist. For example, forest officers who arrested illegal loggers were ordered by the provincial governor to release them.

Under such circumstances, Khuekrit Pramot's cabinet resolved on 13 August 1974 that degraded forestlands except for important watershed areas and protected areas, such as national parks and wildlife sanctuaries, would be distributed to peasants. Land allocation was to be carried out by means of 'forest villages', muban pamai. The principle of the forest village scheme was drafted by Forest Management Division, kong chaikan pamai, and of RFD and approved by the cabinet on 29 April 1975. After that, the National Forestland Management Division, kong chaikan thidin pa sanguan haeng chat, of RFD drew up a working plan. Forest village projects resettled peasants into planned settlements with allocation of house yards and farmlands. The legal title for the land was restricted, namely, only the usufructs were approved and the land could not be sold or mortgaged. Furthermore, various infrastructure was supplied. The degraded forestlands surrounding forest villages were reforested and the villagers were employed in this work. The main target of forest village projects was to secure the basis of livelihood of local people by means of development programs so that further invasion of forestlands could be prevented [ibid.: 41–42]. The projects provided an integrated socio-economic basis for villages, which began with construction of settlements, proceeded to resettlement, land allocation, providing infrastructures, reforestation program, until establishment of village cooperative. The whole program would take 10 years to complete.

Opinions on the objective and the result of forest village projects were divided.

19) Interview with a retired ranking forest officer.
20) Interview with a retired executive officer. The National Forest Land Management Division was founded in 1975, separating from Forest Management Division [ARRFD 1975: 1]. As the formal administrative process in RFD, the division proposed the draft to the Director General, who approved it and sent it to the cabinet. But, according to a ranking officer, informal discussion among the executive officers actually made the policies.
21) Following the explanation on the forest destruction, the reason why forest village projects had to be carried out, cited in annual report of RFD for 1977, is interesting: 'as insufficient responsible officers could not well manage the forests, selfish activities such as illegal logging destroyed national forest reserves. Other than that, citizens without enough knowledge fired and cultivated the forest' [ARRFD 1977: 14]. While illegal logging was criticized as "selfish," clearing forests to expand farmlands was seen somehow sympathetically, an activity carried out because of lack of the knowledge.
Regarding the objective, apart from the official one, a forest officer who was once head of the division responsible for forest village projects says the real purpose of the forest village projects was to guard frontier dwellers from communist influence. Forest village projects included three more types in addition to ‘national forest reserves improvement projects’, \textit{khrongkan prapprung pa sanguan haeng chat}, carried out by RFD: ‘royal projects’, \textit{khrongkan an nueang ma chak phrarachadamri}, ‘rural development projects for national security’, \textit{khrongkan phatana phuenthi phuea khwan mangkhong}, and ‘\textit{“green-Isan (=Northeast region)’’ projects, khrongkan isan khiao.\textsuperscript{22}} The military took the initiative in latter two types. Until 1990, 65, 17, 20, 17 projects respectively of each type had been carried out [\textit{ARRFD} 1991: 42].\textsuperscript{23} Probably each of these types of forest village projects had various objectives.

Regarding the results, Lert and Wood consider forest village projects as a whole to have failed, because the schemes required too much labor to proceed smoothly [Lert and Wood 1986: 26–27]. On the other hand, a retired executive officer says that forest village projects were successful in the initial phase, but subsequently, diminished because the government did not continue to provide budgetary support. Annual reports also support this opinion. In 1975, the first year, national forest reserves improvement projects by RFD, the major of the four types, accounted for forest village projects, but no additional projects were initiated until 1979 [\textit{ARRFD} 1975: 7–10; 1979: 15]. Only 65 projects had been carried out altogether in the 15 years until 1990.

In the area controlled by Ubon Ratchathani Regional Forest Office, the last forest village project was initiated in 1988, but abolished in 1992 when a ‘farmland allocation project’, \textit{khrongkan chatsan thidin tham kin phuea kasetrakam}, usually called ‘Kho Cho Ko’, failed due to large-scale resistance by peasants.\textsuperscript{24} The last mention of forest village projects in the annual reports of RFD was in that of 1993 [\textit{ARRFD} 1993: 40]. Even after the ‘cultivation right project’, mentioned below, was initiated, the method of forest village project has been employed when it is necessary to resettle people from important watershed areas or protected areas, such as national parks and wildlife sanctuaries.

The above scheme of limited and controlled certification of cultivation rights in national forest reserves was drafted and carried out mainly on the initiative of RFD. Almost simultaneously, the cabinet resolved on 4 April 1975 that all residence and

\textsuperscript{22} National forest reserves improvement projects were initiated in 1975, “\textit{“Green-Isan” projects’ in 1987, royal projects in 1975 [Lert and Wood 1986: 25], and rural development projects for national security in about 1980 [RFD 1980: 378].

\textsuperscript{23} In fact, forest village projects were carried out until 1993. However the statistical data in the annual report for 1992 about the result of forest village projects show a sudden increase. This is thought to include the temporarily successful result of ‘Kho Cho Ko’ in 1991, which would fail and be abolished in 1992. Therefore, in order to show the general tendency of the results of forest village projects, data for 1990 is more suitable.

\textsuperscript{24} Interview at Ubon Ratchathani Regional Forest Office.
cultivation in national forest reserves so far would be allowed to continue without any change of status quo, and that those guilty of forest destruction would be strictly arrested. In addition, those who had been arrested for encroachment into national forest reserves were released and allowed to go back to the same land. In 1976, the cabinet authorized the Department of Land, Ministry of Interior to issue ‘No So 3’ land titles following the Land Code in national forest reserves. RFD strongly opposed this. As a result, the authority was withdrawn, and ‘No So 3’ titles already issued were rescinded. But the cabinet resolved once again to allow existing residence and cultivation in national forest reserves [RFD 1976a: 46-47; 1980: 192-193]. Such ad hoc government policies contradicted each other in this way, showing another side of “the age of democracy.”

VI-3 ‘Cultivation Rights Project’
Though opinions on forest village projects are divided, it is certain that they could not stop further incursions by peasants into national forest reserves. National forest reserves still contained large numbers of “illegal encroachers.”

In 1979, a further measure was taken. RFD once again investigated the actual situation of residence and cultivation in national forest reserves, and, as a result, confirmed cultivation rights on existing land of not more than 15 rai (2.4 ha) in degraded forestlands that were unlikely to recover. This ‘cultivation rights project’, khrongkan chuailuea rasadon hai mi sithi thi than kin, usually called ‘So Tho Ko’, was initiated following the King’s suggestion [ARRFD 1983: 38-39]. Since the coup of 1976, military governments had been ruling. After 1977, serious breaches of forest laws were particularly heavily punished under Article 27 of the temporary constitution, thammanun kan pokkhrong rachaanachak, of 1977, which gave the prime minister a wide range of powers to prevent ‘destruction of national security and resources’. So Tho Ko was planned in such circumstances spontaneously by the government, not pressured by public movements. RFD also agreed with the government policy, based on its recognition that the ambiguous situation of cultivation rights would lead to difficulty in peasants’ livelihood. The National Forestland Management Division of RFD therefore drew up a working plan, which it began to carry out in 1982.25

In the cultivation rights project, peasants cultivating land in national forest reserves first applied for confirmation to RFD, by way of the district forest office and provincial forest office. RFD examined each application and issued a deed to permit residence and cultivation, except for important watershed areas and protected areas. First, a ‘So Tho Ko 1’ deed was issued. Five years after So Tho Ko 1, the officers would investigate to make sure the land had been continuously cultivated. If there was no problem, a permanent ‘So Tho Ko 2’ deed would be issued after measurement of the land. So Tho Ko

25) Interview with a retired executive officer.
deeds could not be sold, donated or mortgaged. So Tho Ko followed Article 16 of the National Forest Reserve Act, which provides for permission of land utilization, and thus the land would remain national forest reserves [RFD 1982].

In 1982, when So Tho Ko was actually initiated, So Tho Ko 1 deeds were issued for about 1,338 km² in 42 forests. From the next year, financial scale of the project was expanded with funds from a Structural Adjustment Loan of the World Bank. By 1986, So Tho Ko 1 deeds had been issued for 11,620 km² [ARRFD 1986: 27]. In 1986, the cabinet resolved to limit So Tho Ko deeds to only for truly degraded forestlands, which were designated as 'national forest reserve improvement areas' [ARRFD 1988: 31]. Following the cabinet resolution, investigation was carried out in order to select candidate forestlands. The utilization of the So Tho Ko 1 lands was also investigated. In 1990, issuing of So Tho Ko 1 deeds resumed, and that of So Tho Ko 2 started. Between 1990 and 1992, So Tho Ko 1 was issued for 596 km², and So Tho Ko 2 for 2,141 km² [ARRFD 1990: 40; 1991: 42; 1992: 55]. The cultivation rights project ended in 1993, when all degraded forestlands were transferred to the Agricultural Land Reform Office.

However, even the cultivation rights project could not stop peasants’ encroachment and deforestation. Around 1982, when cultivation rights project was initiated, the designation of national forest reserves entered its final phase. The cabinet resolved on 22 September 1982 that all designation of national forest reserves would be finished within three years [ARRFD 1983: 21]. In this period, most of the forestlands proposed for national forest reserves had been already encroached upon and cultivated by peasants. RFD announced that, when it was impossible to measure the forestlands because of encroachments, regional forest offices would demarcate and make a map of national forest reserves based on the land classification map of 1960 [loc. cit.]. While measurements were taken to solve the contradiction of residence and cultivation in national forest reserves, as in the forest village project or cultivation rights project, further national forest reserves were continuously designated, and the contradiction expanded.

VI-4 Reclassification of National Forest Reserves
In 1993, all degraded forestlands were transferred to the Agricultural Land Reform Office and excluded from national forest reserves. The Agricultural Land Reform Office issued 'So Po Ko 4-01' deeds to landless farmers, in fact, existing cultivators. So Po Ko 4-01 deeds could not be sold, donated or mortgaged, but they could be transferred by inheritance. Before the transfer of degraded forestlands, zoning of national forest reserves began in 1991. National forest reserves were categorized into 'protected forest (zone C)', 'economic forest (zone E)', and 'land suitable for agriculture (zone A)' based on their importance as watersheds and the conditions of slope and soil. The information held by various governmental sections was utilized as well as satellite images, aerial photos, and maps. Zone A lands would be transferred to the Agricultural Land Reform Office and dis-
tributed to landless farmers. Zone E lands would be timber plantation sites [RFD 1992: 9-10]. The classification was approved at the cabinet meetings of 10 and 17 March 1992 [ARRFD 1994: 24].

This classification had been ordered by the Minister of Agriculture since 1989 for the purpose of comprehending the situation of forestland utilization. ‘The National Forest Policy Committee’, khana kamakan nayobai pamai heang chat,26 also resolved in 1991 that RFD would finish the classification within six months [ARRFD 1992: 9-10].

On 4 May 1993, the cabinet resolved that all degraded national forestlands and national forest reserves in which people resided and cultivated land were to be transferred to the Agricultural Land Reform Office. All 11,552 km² of lands in zone A and 59,296 km² of forestlands in zone E that were not actually forested, together totaling 70,848 km², were actually transferred [ARRFD 1993: 40]. After the transfer, in 1995, RFD and the Agricultural Land Reform Office agreed that scattering patches of forest in the transferred lands would be returned to RFD [ARRFD 1996: 4]. About 160 km² are supposed to be returned [Sato 2002: 65]. Existing So Tho Ko deeds were exchanged for So Po Ko 4-01 deeds.

This policy of overall transfer of degraded forestlands to the Agricultural Land Reform Office was submitted by the Minister of Agriculture to the cabinet meeting without consultation with RFD. In spite of objections by RFD, the Minister forced the transfer with immediate effect.27

VII Thai Society from the Viewpoint of National Forest Reserve

VII–1 Structure of Contradiction

Nationwide spatial enclosure of forestlands in Thailand began in the 1960s with the system of national forest reserves, as a part of integrative national land development. The establishment of national forest reserves proceeded without prior investigation of residence and cultivation and without an enforcement system. As a result, while reserves continued to be demarcated and designated on the map, there was almost no substantial management, and peasants’ invasion and cultivation in national forest reserves could not be prevented.

The popular arguments are that the failure of the institution of forest conservation has been caused by its dissociation from the reality of local people’s life or by RFD’s lack of management ability. In addition, it is often pointed out that friction between RFD and the Department of Land, Ministry of Interior, was an obstacle to forest conservation

26) The National Forest Policy Committee was established in 1985, chaired by the Vice Prime Minister, to estimate long-term national forest policy. The national forest policy was submitted later in 1985 and approved by the cabinet [ARRFD 1985: 14].

27) Interview with a retired executive officer.
However, the strangest point is that national forest reserves continued to be designated without any systematic revision, even after it became clear that national forest reserves could not achieve substantial forest conservation. In addition, the system of national forest reserves could not serve for the exploitation by influential people seeking rent, as the designation of forest reserves did not coincide with that of commercial logging sites. It is also pointed out that control over large areas of national forest reserves has been the source of RFD’s power [Sato 2002: 196-197].

It would be wrong, however, to assert that RFD continued to designate national forest reserves on the map only for the purpose of expansion or maintenance of its own power. For example, designation of reserved forests before 1938 by authority of local administrative sections could not expand the authority of RFD. Regional forest officers like Mom Chao Suepsuksawat enthusiastically urged the designation of reserved forests, because they thought if they did not do so, the forests would disappear [Mom Chao Suepsuksawat 1976: 97]. When the national forest reserve system was designed as a part of development policy in the 1960s, the officers were probably conscious of the need for spatial enclosure of forestlands for sustainable, scientific forestry. Local officers who carried out designation works were also faithful to their roles, with the result that such large area of national forest reserves were designated without substantial functions. This is the result of sectionalism even within the same division in RFD.

At the same time, the continuous designation of national forest reserves was made possible by its lack of substantial effects on actual forest utilization. Quite limited control and policing did not effect local people’s livelihood, and thus they did not resist the national forest reserve system itself. Even the limited number of forest protection units overlooked a certain portion of breaches, adjusting their conditions to the needs of local people. The principle of national forest reserves based on the idea of scientific forestry and the actual situation of clearance and occupation of land in national forest reserves by peasants in accordance with their custom have been able to co-exist. The contradiction has expanded. The government has dealt with it by confirming existing cultivation. But the principle of national forest reserves has never been modified. The contradiction has also largely not resolved.

VII-2 Balancing Principle and Reality
The flexible maintenance of the balance between the principle and reality is remarkable. The government draws up “ideal” policies or institutions regardless of their feasibility. Many regulations will not be followed, and flexible discretion in implementation term

28) As well as these academic papers, a retired director general’s essay in a commemorative volume criticizes policy and procedures of the Department of Land and the Police that encouraged deforestation [Chaloem 1976]. This idea is widely shared by forest officers.
will be allowed at the field level. The larger the gap is between the principle and the reality, the greater the discretion that is allowed and the more flexible the measures that can be taken. This is a makeshift arrangement at least. But the positive evaluation is also possible that forest conservation has been carried out as far as possible by balancing diverse needs in society. In contrast to national forest reserves, the commercial logging system substantially functioned by means of an annual logging plan for each site and monthly inspection by forest officers, though there were some breaches of regulations by logging companies. This means that while those in power at a given time did not seek so much personal gain from the forest resources that the formal system could not be maintained, local people also did not resist commercial logging in their own area.

This kind of contradiction between the principle of the policy or institution and the reality can be found in most countries. However, how the contradiction is dealt with by means of institutional amendments or implementation at the field level is different. For example, among Southeast Asian cases, Java probably presents the starkest contrast from the Thai case shown so far. Since the Dutch colonial era, important teak forests had been enclosed and the *tumpang sari* system, similar to *taungya* in Burma, had been introduced to manage teak plantations. The forest resources had been managed so as to exclude local people, who offered constant resistance. In order to maintain this forest management system, the government sent large numbers of forest police into rural areas in order to regulate the forests effectively [Peluso 1992].

The occupancy and conversion of national forestlands to farmlands can be found not only in Thailand but also in the Philippines and the Outer Islands of Indonesia. In these areas, however, rapid deforestation by large-scale unsustainable commercial logging was accompanied by the lack of a conservation system or destruction of such a system established in the colonial period [Ross 2001]. The unique point of Thailand is that while a forest conservation system has been elaborated and large areas of national forest reserves have been designated, they have never substantially functioned since their introduction, at least until the end of the 1980s.

VII–3 *How to Deal with the Contradiction*

Since the logging ban was introduced in 1989, nature conservation policy has been strengthened. Protected areas of national parks and wildlife sanctuaries have been expanded. On the other hand, degraded forestlands have been transferred to the Agricultural Land Reform Office and distributed to peasants with *So Po Ko* deeds. Furthermore, following a cabinet resolution of 1997, investigations have been carried out with a view to issuing *So Tho Ko* deeds for lands within protected areas that have been cultivated since before the areas were designated.29 The remaining forests outside the

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29) Interview with forest officers in Ubon Ratchathani Regional Forest Office. This cabinet resolution was the result of dialogue with a farmers’ protest group. It is called the ‘Wang’
protected areas, mostly small patches surrounded by farmlands or settlements in North-east, are now being reclassified as 'community forest', *pa chumchon*. Legislation of a 'Community Forest Bill', *Prarachabanyat Pa Chumchon*, is in the final stage after almost 10 years of debate.

Will all of these measures really lead to resolution of the contradiction? As far as national forest reserves are concerned, it is true that the contradiction will diminish, partly because protected areas have taken over the roles, areas, and authorities of national forest reserves. However, new danger of contradiction is also found. The field level officers and activists forecast the draft of Community Forest Bill will provide strict guidelines to be applied uniformly all over the country, and the regulations will not be completely enforceable. At present, many de facto community forests exist, to which the officers and activists have had commitments. They say many of them will not acquire legal status even after the bill is enacted, because they do not fulfill the conditions the bill requires.

The contradiction between the principle and reality is not necessarily harmful. As shown so far, flexible implementation in the field level secured the local people's livelihood. Moreover, much higher level officers were also realistic as they did not try to punish field level discretion or make much efforts to enforce the institution, which, if they had wanted to do so, would not have seen difficult in the top down bureaucracy of RFD. Therefore, this flexibility to deal with contradiction does not represent a resistance by the local people and field level officers to the central government's policy, but is a social mechanism of the whole administrative process as a social mechanism, this flexibility is much better than powerful enforcement of idealistic policies leading to the tragedy as Scott [1998] points out.

However, the legal status of the people in the contradiction, for example, overlooked "illegal encroachers" because they have been staying before the designation of national forest reserves, or in national parks nowadays, must be insecure. Therefore, institutionalization of this flexibility is required in Thailand. More authority should be given to regional or local level to meet diverse socio-cultural situations in each region so that field level officers' discretion can legally secure the local people's livelihood and higher level officers can also formally supervise such discrentional implementation. The argument on community forests often emphasizes local people's right to the resources against the government's power. Though the rights issue is also important, we should focus more on the cooperative relationship among central administration, local administration and the communities in order to construct harmonious relationship between human society and the forests.

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Nam Khiao resolution, *mati wang nam khiao*, after the place where the "remote" cabinet meeting with the farmers was held.

30) For example, Anan [2000].
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