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Conflicts and Cooperation in Resource Governance: State Control of the Public Domain and the Role of Local People in Cross-National Perspectives:

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Natural Resource Control and Bureaucratic Oversight in Thailand**

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**State Inaction in Resource Governance:
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Abstract

This paper argues that the continuing failure of environmental governance by the state lies not only in inappropriate actions taken by the responsible agencies, but also in the way bureaucratic structures have evolved to limit their policy choices. Whether effective or not, the state continues to be dominant in determining the use (and non-use) of natural resources in many parts of the world.

Based on a detail case study of Thailand, the paper draws two major conclusions: First, inter-departmental conflict has historical roots that have shaped the present policy environment. New mandates and responsibilities are continuously added on top of the policy space. Because the Thai government established vested interests in the field of production in its formative period in order to expand commercial activities and generate revenue, a more recent mandates to conserve resources were left with little room. The late-coming departments are often pushed into performing mandates that limit them to the area of research and planning, often in isolation with the authority to enforce regulations. This asymmetric division of labor induced not only policy inaction among the departments who dared not step into the territories of other departments, but also provided a safe haven for production-oriented departments.

Second, bureaucratic competition is often controlled by pre-existing veto players—i.e., those who now belong (and originally belonged) to the production sector and developed strong vested interests in the status quo. The way bureaucratic division of labor occurs gives us hints on why innovative institutions perform poorly. Environmental projects that ultimately aim to regulate production must identify the key veto players and incorporate them strategically from the outset if they are to advance their objectives.

Keywords: state inaction, Thailand (Siam), resource administration, environment, bureaucracy

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1. Introduction

Southeast Asia's natural environment has suffered severe damage over the past four decades. Thailand has lost more than half of its forest cover in the past 40 years, and air pollution measured in terms of NO₂ and SO₂ drastically increased between 1990 and 2000. Bangkok and Jakarta continue to rank among the world's most polluted cities in terms of the concentration of particulate matter, and CO₂ emissions are increasing in the region as a whole (ESCAP 2008). Theories based on ecological modernization, such as the environmental Kuznets curve, predict that successful economic growth in Southeast Asia will soon alleviate, if not eliminate, the region's environmental problems (Grossman and Krueger 1995; Selden and Song 1994). Indeed, Southeast Asian countries have some of the world's most advanced environmental legislation with extensive support from international donor agencies such as the World Bank (Goldman 2005; Hicks et al. 2010). Despite these positive trends, however, environmental quality has continued to deteriorate.

We must seek an explanation for this lack of improvement, particularly in the case of such advanced Southeast Asian countries as Thailand, which is equipped with the institutional resources necessary to address these issues, often with strong support from the city-based middle class. In fact, environmentalism propelled by the middle class in Thailand has been strong enough to invite popular movements which have contributed to regime changes since the 1970s (Forsyth 2004). And yet, for all these favorable conditions, environmental quality apparently continues to deteriorate.

Based on a case study of Thailand, this paper argues that the continuing failure of environmental governance by the state lies not in inappropriate actions taken by the responsible agencies in addressing policy problems, but in the way bureaucratic structures have evolved to limit their policy choices. Whether effective or not, the state continues to be dominant in determining the use (and non-use) of natural resources in many parts of the world.

In Thailand, for example, state-owned land consisting mainly of forest accounts for roughly 40% of total land area, providing refuge for more than a million “illegal” encroachers (Sato 2003). Strict conservation policies for forests have often created landless people who were forced to encroach onto state land for subsistence. Environmental impact assessment regulations are just another mechanism for the state to exercise their power.¹ Note, however, that resources such as forests, land, water, and minerals are not managed by “the state” as a coherent decision-making unit, but by various ministries and departments within the state, whose interests often conflict with each other. As we shall examine, these intra-governmental relationships can be critical in executing a timely policy.

Given the complex bureaucracy surrounding environmental policies, a plausible approach is not only to criticize the poor performance of those agencies, but to ask what prevents environmental departments from performing better: to transform the environment from a mere target of exploitation into long-term reservoirs for sustainable development.² It is not enough to blame governments for not fulfilling their responsibilities; rather, we must go one step further and explain why they cannot fulfill them. In other words, state impact must be examined not only in terms of state action, but also from the viewpoint of inaction or delayed action.

The problem of state inaction has only just begun to attract scholarly attention. In the field of environmental management, lack of enforcement, neglect of local voices, and slow decision-making are highlighted among the costs (OECD 2004). However, the problem of inaction goes further back in history.

1. It is impossible to ignore the impact of international investments in environmental projects, ranging from tree plantation projects to climate change interventions. Although there are many private initiatives, major funding still comes from governments and multi-lateral banks. According to the latest statistics compiled by the OECD, funding allocation for natural resource- and environment-related activities amounts to 17% of the total ODA worldwide (OECD 2008).

2. Indicators of sustainable development as used in this paper shall be whether a country has enforced mechanisms such as the polluter pay principle to internalize the cost of environmental damage, legal arrangements to punish those who damage the environment, or national plans based on sustainable yields for renewable resources, and governmental units to monitor and publicize the results.

In the 1960s, when Japan's economic growth was as fast as Thailand's is today, for example, Minamata and other notorious incidents resulting in pollution have often been characterized as unavoidable side-effects of rapid industrialization. However, closer examination reveals that the Japanese government had previously suppressed a 1949 draft recommendation from the Resources Council, an inter-ministerial advisory board that urged stricter enforcement of water discharge regulations. The recommendation included innovative policies such as establishing total emission control standards, which only became formalized in 1970 (Hirano 2003). It is worth noting that this recommendation was drafted in the late 1940s, when Japan's prospects for economic recovery were dim and no expert could have predicted the remarkable economic growth to come. If the government had taken up even the compromised version of the recommendation which was issued in 1952, they could have avoided, or at least minimized, the subsequent environmental damage nationwide.

The Resources Council could not push through the original draft due to strong opposition from the mining industry and the Ministry of Trade and Industry. Forces in favor of increased production even at the cost of the environment made the original draft toothless, allowing status quo industry activities to continue. Furthermore, a group of scientists who received a large amount of funding from a chemical company ended up playing a complicit role in obscuring the ultimate cause and responsible parties, helping to delay the resolution.³ It was only in April 2010, more than 60 years after the initial identification of the real cause, that the Japanese government finally decided to compensate the Minamata victims in its widest definition.

Such policy inaction often exacerbates social and environmental damage even further and is difficult to remedy since the inaction is the outcome of intention rather than ignorance. Costly inaction is often attributed to a lack of social forces (e.g., middle class, media, NGOs)

3. A critique of the negative role scientists played is powerfully provided by Ui (1968). The role of science in justifying inaction is well documented around the world (Ascher 2004).

engaging in adversarial politics to press the government into acting promptly or to the absence of a democratic system that facilitates such movements (Sonnenfeld 1998). However, almost no attention has been given to the intra-governmental dynamics and the historical roots that have facilitated such state inaction. Thus, the purpose of this paper is to analyze the historical evolution of bureaucratic structure in Thailand that has laid the foundation for persistent state inaction.

This paper begins with an assessment of the relevant literature, with a brief summary of the situation before the state had institutionalized resource governance. I will then discuss the ways in which state bureaucracies were formed to govern resources. I will then examine the early years of resource governance when territorialization of land-based resources began in conjunction with politics among local chiefdoms, European resource companies, and the central government. This reveals a surprising pattern, extending to the practices of resource departments today. Understanding the historical roots of the problem will suggest the most pragmatic policy advice for today: what not to do to avoid repetition of policy failures.

2. Theories and approach

2.1 Literature

A recent shift in emphasis from government to governance (Reed and Bruyneel 2010; de Loë et al. 2009) has brought about a wider understanding of stakeholders in the study of politics. Harrington et al. (2008: 200), for example, defines government as “the formal, centralized and vertical exercise of power and authority, such as through regulation or market based instrument,” while in governance “power and authority are horizontally decentralized and devolved to broader members of society.” This type of distinction invites the implicit misunderstanding that government is singular and governance is plural in terms of the agents involved. It is true that, with a notable rise of non-state actors such as NGOs and civil society

organizations in the environmental sector, the government is no longer the sole source of decision-making authority in many parts of the world.

Nevertheless, this shift should not blind us from the actual effects of government policies. Here I am referring not only to the policies of the ministries directly responsible for the environment as a sector, but those of all other state apparatus whose policies may have an impact on the use of natural resources and the environment (e.g., energy, transportation, trade). If governance connotes collective horizontal decisions that affect the environment, we must first examine the governance within the government structure.

Unlike the typical critique of the state based on shortages of financial and technical means to natural resources and environmental conservation, a new set of theories appeared in the 1990s which identified the abundance rather than the shortage of resources as the problem—the “resource curse” hypothesis. Originally proposed by Richard Auty in 1993, the “resource curse” was widely popularized by the often-cited paper by Sachs and Warner (1995) that examined the statistical correlation between resource dependence and economic growth and concluded that dependence on exports of natural resources tends to retard growth. From a more political perspective, Ross (1999) argued that resource dependency diminishes the state’s incentive to collect taxes and therefore be accountable to its citizens. Like foreign aid, rich natural resources can easily be transformed into cash for a privileged few while taking away the opportunity for democratic development (Moor 2001). A revisionist argument has also emerged, claiming that resource abundance can also facilitate a democratic regime, pointing to the importance of mechanisms in deriving a particular regime type (Dunning 2008).

Independent of whether resources are treated as positive or negative with respect to economic development, the dominant approach to the study of resource governance has been primarily aggregative, relying on a cross-national comparison of environmental indicators based on regression analysis (Dasgputa et al. 2001). A few exceptions stand out which take a more nuanced contextual approach. James Scott, for example, in *Seeing Like a State* (Scott 1999),

argues that the art of government is geared primarily toward making its subjects more visible so that they can become easy targets for taxation, conscription, and various other means of exploitation that empower the central authority. Scott makes his case by tracing the history of the simplification of forests and landscapes in the European context.

In a non-Western context, Agrawal (2005) asks why local people in Northern India who were originally against state conservation policies ended up supporting and participating in state policies. Agrawal demonstrates the ways in which the decentralization of forest management has produced people who willingly cooperate with state policies. His work is very much informed by Foucault's concept of governmentality, whereby governmentality is defined as the "art of government" in which governments try to produce citizens who are best suited to fulfill the governments' policies (Foucault 2007). Jones (2007: 174) rephrases this as "the techniques and strategies by which a society is rendered governable."⁴ This recent theory of governance, heavily influenced by Foucault, does not simply rely on a dichotomized framework of the state versus the people, but more on the co-evolution of both to serve the interests of power.

The main problem I find with Scott and others critical of the state is that they tend to treat states as monolithic and abstract entities: "monolithic" in the sense that states are treated as self-contained bodies with almost no internal diversity or conflicts, and "abstract" in that little attention is paid to observable variables such as the number of staff, budgets, legal mandates, and technologies mobilized within the state. Disturbances to the state system are expected to be derived from non-state forces, such as civic movements, NGOs, and international organizations that pressure states to change. Although these studies have undoubtedly introduced a new

4. Foucault highlighted the "arrangement of things" as the original form of governmentality, where "things" included not substances or materials but the relationship between people and materials. He insisted that the contemporary mode of government is not characterized by the state's encroachment on the liberties of society, but rather by a link between techniques that assure coercion and those processes through which free individuals themselves modify or construct a self. This notion is very close to our definition of resources, although "resource" tends to connote a positive utilization of materials, ignoring the negative aspects such as inequality, exploitation, and natural hazards.

dimension to the study of natural resources, they require further refinement from the perspective of public administration. This paper attempts to pursue this line of thinking.

2.2 Approach

Natural resource governance possesses distinct features, and it is important to be aware of these before any analysis is conducted. First, there is often a gap between the changing speed of resource needs and the ability of society to supply them effectively. While institutional change takes place slowly, resource situations may change rapidly due to sudden unexpected social and natural causes. Second, natural resources are typically extracted in remote areas that therefore have low visibility, which makes it difficult for civil society and the media to act as corrective forces. Third, because the assigning of value to natural resources usually predates investment of capital and labor, capturing control per se is more than half the economic/political battle. Fourth, there is a tendency among policy makers to downplay socio-economic preconditions in which a particular resource policy produces effects, possibly leading to unfeasible or socially unbearable responses. Because natural resources have conventionally been divided into sectors (e.g., water, forests, energy) that often render them “technical”, much effort has gone into the science and technology of resources as material objects, while the social and institutional foundations of these technologies are often neglected.⁵ These forces work differently in different settings, creating a variety of institutional responses to natural resource issues.

To accommodate these characteristics in the present paper, I go beyond investigating a single sector to develop a cross-sectoral view of the way in which agencies in the environmental field intersect. I will observe the sequence of departments established to perform particular functions, and analyze their activities. More specifically, by listing the

5. This is perhaps the very reason why environment policies, when they deprive people of access to vital resources such as land and forests, can become a harmful weapon against people, even if it is less detectable as such (Peluso 2003).

purported responsibilities of each agency and arranging them in a timeline, I will explore the interrelations among them from a historical perspective.

I collected data from archival sources on the formative years of governments and official reports on governmental activities, such as annual reports and gazettes. Information on organizational structure is particularly helpful in identifying the range of state interests and the responsibilities assigned to them. To understand the particular relationship that states have developed with resources and environment, a historical view focusing on a particular context is helpful, since it helps to reveal the causal mechanism by uncovering the way in which one event might lead to another. The very definition of “resources”, for example, has changed over time, as do the technologies of resource control and utilization.⁶ In contrast to statistical studies, historical case studies can help to establish agency (Rueschemeyer and Stephens 1997), which allows us to get closer to the explanation of causality.

This method of investigation may invite challenges. Publicly stated “responsibilities” on official documents do not necessarily reveal what agencies actually do. Furthermore, even official responsibilities change over time, which might make it difficult to study the “evolution” of government activities and responsibilities. It is true that organizational mandates change in response to changing needs and resources to address governance issues. However, a cursory observation of the evolution of resource administration reveals that changes are observed more in the emphases than in the range of state interests. Declared responsibilities therefore serve as a measure, however imperfect, of the extent of coverage where state agencies interact with nature and society.

6. The concept of “renewability”, which constitutes an important element in the definition of what resources are, is intimately linked to a human dimension of time as measured in terms of seasons and decades (Bankoff and Boomgaard 2007: 2).

3. Case study of Thailand

3.1 Rich resources and scarce population

Why study Thailand? Until the financial crisis of 1997, Thailand had been an engine of growth in mainland Southeast Asia, which has now suffered serious environmental damage. There are several reasons why this country deserves closer attention: 1) Rapid economic growth has brought about severe environmental damage; on the other hand, 2) Thailand has taken a proactive stance in responding to environmental issues as exemplified by the enacting of comprehensive environmental laws in 1975 and the more progressive creation of a new Ministry of Natural Resources and Environment in 2002; no other country in Southeast Asia has such a comprehensive ministry covering both natural resources and the environment; 3) Unlike her poor neighbors in Southeast Asia, Thailand has the human and financial resources necessary to address environmental issues; and 4) Thailand is the only country in Southeast Asia that has escaped direct colonization, and thus we can expect a more indigenous process of institutional development. These conditions make Thailand an interesting case study.

Although Thailand has abundant natural resources, including water, land, and forests, it was not until the late 19th century that the Thai government started to govern aspects of nature as “resources.” The relative scarcity of labor in Siam due to a high infant mortality rate made preservation of the nation’s manpower one of the chief preoccupations of the Siamese government. Wales observed that this insufficient labor population rendered the Siamese government incapable of developing Siamese resources to their full potential (Wales 1934: 10).⁷ With forest cover of over 60% until the 1950s, abundant exportable mineral resources such as tin, and a fertile delta to produce rice for export, Thailand is one of the most ideally situated countries for carrying out economic development. Interestingly, because of the abundance of

7. In other words, under conditions of abundant natural resources, people “had few real wants that the state could usefully have attempted to relieve, and until comparatively recent times it formed no part of the programs of Siamese kings to raise the standard of living of their subjects” (Wales 1934: 226).

natural resources, the state did not attempt to administer the state in the peripheral areas until the late 19th century. The control of labor to utilize the land and resources has been more valuable to governing elites than control of the land per se (Ingram 1971).⁸ Without labor, there is no way to make use of the natural resources waiting to be tapped in the periphery.

Until the mid-19th century, valuable resources such as minerals and timber were managed by local lords (locally called Chao), many under Royal patronage, with whom foreign companies made trading deals on an individual case-by-case basis. It is only since the late 19th century that European companies in Siam began to operate large-scale enterprises to exploit natural resources (Falkus 1989). One might wonder how and why state regulation of natural resources is even needed when resources are plentiful. It was the interest of Western countries such as Britain and France in mineral and forest resources that prompted the Thai government to respond by establishing a centralized administrative system to avoid internal discord within the country. Internal conflicts may provide Western forces with an opportunity to intervene; the need for governance was thus derived not from the state of resources as such but from the perception of external threats to these resources.⁹

3.2 Original formation of resource bureaucracy: mining and forestry

How did Thailand (called Siam until 1939) begin to create state spaces in which environmental administration was later built? Resource administration in Thailand evolved hand-in-hand with state leaders' sense of scarcity for a particular resource, which prompted interventions from the political center. A closer look at two of the oldest governmental

8. It was not only the abundance in resource availability but the high infant mortality that made "preservation of the nation's man-power one of the chief preoccupations of the Siamese government" (Wales 1934: 9).

9. These international interactions, as well as the fact that Europeans established extractive industries only in locations with relatively low mortality rates, demonstrate that resource development is built on layers of socio-political foundations (Bankoff and Boomgaard 2007: 11).

organizations, i.e., the Royal Mines and Geology Department and the Royal Forest Department, gives us hints as to how this process unfolded in the beginning.

The Royal Mines and Geology Department (later renamed the Department of Mines) was established in 1891 with two foreign advisors who later became chiefs, one German and one British. Thailand had a long history of metal production, but capital-intensive development began around the mid-19th century with Chinese enterprises. For a long time, people who lived in the tin-producing areas in the South had been allowed to pay their taxes with tin (Wales 1934: 200). Tin became the first royal export monopoly to assist the Siamese economy. However, most mineral resources that were known to exist in the late 19th century were not subjected to actual exploitation until the arrival of the British. Herbert Warrington Smyth, a British geologist appointed as one of the first directors of the Royal Mines and Geology Department, wrote the following in his memoir, *Five Years in Siam*.

There were a dozen or so big mining concessions in existence, covering in some cases a hundred square miles, a weariness of the spirit of their owners, on which, for the most part, no rents had been paid and no work had been done. They had been mostly granted to men of the concession-hunting type, whose sole objective was to sell their concessions as soon as possible for the highest price to some gullible company (Smyth 1898: 33).

Among the first tasks for the new department, therefore, was to begin geological surveys and to draft a code of mining regulations to help the government secure tax revenue. The political effects of resource centralization, however, should not be overlooked. As Loos keenly observed in her introduction to Smyth's *Five Years in Siam*, "[s]cientific knowledge, in the form of cadastral and mineral surveys of the areas, was a necessary step in the broader centralization and commercialization processes" (Loos 1994: XVI).

The practice of map making has enduring effects leading to contemporary turf battles among the land-base departments over legitimate jurisdiction. Relying on different laws and maps administered by various departments, issuing land titles has always been a problem (Werachai and Kasemsun 2010). The so-called “Re-Shape” program initiated by the government to clarify the overlapping jurisdiction in 2005 only revealed that the state had not been able to solve this problem, despite increasingly sophisticated map-making technology. The forestry and mining departments were among the first resource agencies that utilized maps to demarcate their properties.¹⁰

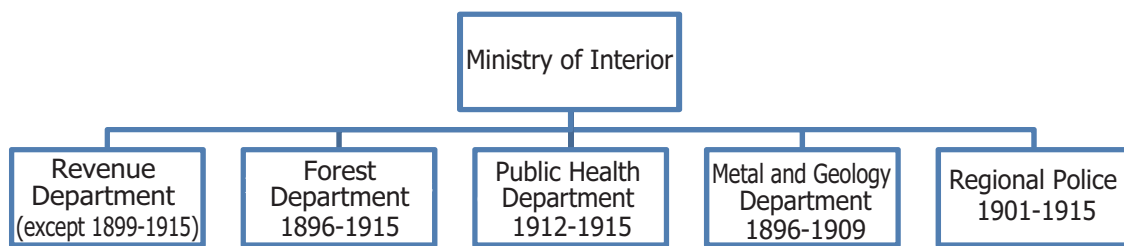
The Royal Forest Department (hereafter RFD) was established in 1896 by H. Slade, an English forester who served as the first Conservator of Forest (Chao Krom Pamai) until 1901. The near exhaustion of teak forests in Burma, even after conservation measures were tightened, and the growing demand for teak by the British facilitated the centralized control of forests in Siam. Slade started the RFD with 16 Europeans and nine Siamese (Slade 1901). The main responsibilities of the department in its early years comprised survey work and inspections in collaboration with the Royal Survey Department. The major objective of the RFD during this period was to check the operations of dominant timber firms such as the Bombay Burmah Trading Corporation that were capable of damaging the forest and diminishing the government’s opportunity to produce revenue (Slade 1901). Marking timber, fixing boundaries of leases, and settling disputes were among the most important work done by the RFD to achieve this objective. As we can see from Figure 1, two resource agencies were under the control of the Ministry of Interior, indicating the significance of natural resources as a key political issue during this period.

It is also worth noting that the colonial threat from the Europeans was used to justify the centralization of resource control in the central government: “After a short time a regular

10. The forestry and mining departments were among the first resource agencies that utilized maps to demarcate their properties.

Forest Department was established, the Siamese Government justifying the step to the chiefs by representing that in this way the Europeans would be kept in order” (Macauley 1934: 60). The Siamese government was skillful enough to use intimidation from the British and French as an opportunity to push for centralization, a move that would otherwise be difficult. Through the control of timber rents, the RFD gradually expanded its domain of influence from areas where actual timber was located to the potential yield as the label “forest reserves” indicates. It is at this stage that the word “forest” had clearly become political (Pesulo and Vandergeest 2001).

Figure 1. Organizational structure of the Ministry of Interior circa 1900



Source: Bunnag 1990.

The basic structure of resource governance, which is partially based on the assumption that local people, particularly the hill people who tend to lie beyond state control, are an obstacle to sustainable exploitation, was also founded during this formative period. Slade highlights the following as key tasks for the department in its initial stage (Slade 1901: 7).

As soon as sufficient staff, both controlling & executive can be established, it is most important that attention be paid to the following: taking up reserves, fire-protection, planting, creeper-cutting, clearing of teak samplings, girdling, preparation of working plans and regulation of hill-clearing.

Slade continued by characterizing the agricultural practices of hill people as “wasteful” and emphasized that “this last is most important and until some definite policy has been determined on, it will be impossible to estimate the teak areas at the disposal of the government” (Slade 1901: 7). One can clearly see that forest protection necessarily involves controlling not only the forests themselves but also the people who have had interactions with forests, especially those local people who were perceived to have a negative influence on the resource.

The domain of governance went beyond the resource sector to include transportation (e.g., how best to transport logs to market), communication (e.g., how to secure effective translators in remote areas), and the division of authority between the central government (i.e., the Ministry of Interior, to which the RFD belonged) and the RFD, the headquarters of which was located in Chiang Mai under the control of the British Conservator.¹¹ The initial period of land-based resource governance set the stage for the division of public and private, with most of the under-utilized forests falling into the former, making it clear that all resources in the public domain belong to the state. It is on this colonial legacy that subsequent environmental administration was to begin. Mineral resources, on the other hand, were similarly monopolized by the state, yet its effects on the livelihood of the rural population were much less due to the geographical concentration of mineral resources in the South.

3.3 From natural resource to environmental governance

The post-WWII emphasis on “planning” opened up a new stage for state development with the introduction of various “environmental” agendas as targets for public policy. In Thailand, the first five-year economic and social development plan, launched in 1961, made it necessary, for the first time, to coordinate ministerial interests in a coherent national plan,

11. In his reflections of the first five and a half years of service as Conservator of Forest, Slade highlights this tension, in addition to the limited discretion given to the Conservator, as major obstacles to effective resource governance in the field (Slade 1901).

although the explicit acknowledgment of the environment as part of a policy agenda would not come until the mid-1970s, when the Enhancement and Conservation of National Environmental Quality Act of 1975 was established. The new act was largely in response to the pollution controversy over the Mae Klong River by sugar-mill owners in 1971 and the 1973 scandal over the abuse of Tung Yai Wildlife Sanctuary by senior persons (Stubbs 1981). Administratively, it facilitated the creation of the National Environment Board, the first overarching decision-making body on environmental issues, with a supporting secretariat housed in the Prime Ministers Office. This organization gave birth to the environmental division (i.e., pollution control, environmental education, planning and policy), later to be upgraded to departments in the Ministry of Science and Technology and more recently housed in the Ministry of Natural Resources and Environment. In this way, state interests have gone beyond land-based resources to include fish, soil, air, water quality, and people's perception of the environment.

Table 1 depicts the series of new departments established to take on responsibility for various aspects of the environment and natural resources. I focus on "departments" rather than other organizational units in the government since they are the most cohesive unit with a large amount of discretionary power given to their Director Generals. Central mandates are extracted from the legal stipulation that justifies the existence of each department. The departments are given legal authority not only to carry out policies, but also to employ the technical as well as organizational technologies (e.g., mapping, surveying, harvesting, accounting) that would most effectively achieve policy goals. Mandates listed here are based on the *current* objectives described in official documents such as annual reports. Note that they have not remained consistent over time.

Table 1: Sequence of departmental establishments and their mandates

Department (year established)	Overseeing Ministries	Central Mandates
Department of Mineral Resources (1891)	Interior (1891-1901)→Agriculture (1901-1932)→Interior (1932-33) →Economic Affairs (1933)→Agriculture (1933)→Economics (1941-42)→Industry (1942-63)→National Development (1963-1973) → Industry (1973-2002) Nat. Res. and Environment (2002-present)	Develop policies and plans; enforce compliance with law; conduct exploration and research; specify standards
Royal Forest Department (1896)	Interior (1896-1920)→Agriculture (1921-1932)→Interior (1932-33) Economic Affairs (1933-1935)→Agriculture (1935-2002)→Natural Resources and Environment (2002-present)	Control, regulate and protect forest; conduct studies on afforestation; promote afforestation; limit forest usage; conduct research
Department of Land (1901)	Agriculture (1901-1932)→Interior (1832-1933)→Economic Affairs (1933-1935)→Agriculture (1935-1941)→Interior (1941-present)	Operate activities based on the Land Act; coordinate and evaluate land works (including statistics); develop land management
Department of Fisheries (1926)	Agriculture (1926-present)	Enforce acts; conduct research; explore; analyze; conduct research on fishing grounds; promote cooperation with fisheries; promote and develop occupations relating to fisheries
Royal Irrigation Department (1933)* *Originally established as Department of Canals in 1902.	Agriculture and Commerce (1928-1933)→Economic Affairs (1933-1935) →Agriculture (1935-1963) → National Development (1963-1971) →Agriculture (1972-present)	Control and build small/mid-sized reservoirs; operate irrigation systems; maintain departmental property; address water shortages; develop measures against inundation; conduct research; share water IT
Land Development Department (1963)	National Development (1963-1971) → Agriculture (1972-present)	Conduct soil surveys and classification; perform soil analysis; carry out land use planning; conduct land development experiments; assist farmers in soil and water conservation practices and soil improvement; seed production; transfer technology for soil development and soil science
Office of National Environment Board (1975) *Later to be part of the Ministry of Science and Tech.	Office of the Prime Minister (1975-1991) →Science and Technology and Environment →MONRE (2002-present)	Design policy and planning; conduct environmental impact evaluations; set environmental quality standards; promote environmental information and education.
Pollution Control Department (1992)	Science and Technology and Environment (1992-2001) → MONRE (2002-present)	Form policies and plans for pollution control; establish standards; monitor environmental quality; investigate public complaints
Department of Environmental Quality Promotion (1992)	Science, Technology and Environment (1992-2001) → MONRE (2002-present)	Promote, compile, develop, and disseminate environmental data; act as a national environmental information center; support public participation; coordinate and formulate plans and measures; conduct research on environmental management and technology.
Office of the Environment and Natural Resources Policy and Planning (2002)	Science, Technology and Environment (1992-2001) →MONRE (2002-present)	Formulate and coordinate policies and plans for natural resources; environmental conservation and administrative management; conduct research; monitor performance on implementation of policies and plans; appraise Environmental Impact Assessment (EIA) reports; manage Environmental Fund; propose policies and give advice on development; facilitate international cooperation
Department of Water Resources (2002)	MONRE (2002-present)	Prepare a master plan on raw water resources; conduct research, development, conservation and rehabilitation; promote and support community participation; implement, monitor, and evaluate work
Department of Groundwater Resources (2002)	MONRE (2002-present) (Separated from Department of Mineral Resources in the past)	Manage artesian well resources, including research, planning, evaluation and other support
Department of National Park, Wildlife and Plant Conservation (2002)	MONRE (2002-present)	Conserve and preserve national parks, wildlife and plants; restore ecology; monitor national parks; conduct research; establish standards
Department of Marine and Coastal Resources (2002)	MONRE (2002-present)	Form policies and plans on marine and coastal resource conservation; monitor, research, and conserve marine and coastal resources

Source: Author.

Note: Names of the departments are those that are currently used. Departments dealing directly with agriculture (e.g., rice) and bureaus dealing with general affairs of the Ministry have been excluded. Also, departments inside the Ministry of Energy (2002-) are excluded from this list.

This reveals a general trend. The state's interests have shifted from production and revenue collection to conservation, from land-based resources to mobile assets, and then later to broader environmental protection, including public awareness. It is true that newer departments are assigned to resource and environmental conservation beyond production and revenue collection, but two features must be acknowledged: 1) Environmental agencies are becoming more narrow in scope as well as increasingly technical, employing advanced monitoring technologies and hiring more Ph.D.s.; and 2) Some of the newer departments lack a legal basis, which leaves them in a relatively weak position in inter-departmental negotiations over budget and jurisdictions. Neither the Water Resources and Marine Department nor the Coastal Resources Department, for example, has its own legal backbone, in contrast to the Fishery Department, which was established on the basis of the Fishery Act. One can argue that newer departments have managed to secure a niche for themselves, but from a larger perspective, this trend has only helped to compartmentalize environmental policy, which had already been overly fragmented.

The early emphasis on a demarcating state property for more production set the basic tone of subsequent resource governance, while the mandates of newer departments were increasingly squeezed into the web of already established vested interests. Departments created in the early 1990s to take responsibility for "environmental regulation" mainly monitor and clean up environmental damage that has already occurred, while the systems of production that gave rise to this damage continue to operate unhindered.

The important point here is that even when the older department's key mandates are outdated, they manage to survive by simply modifying the mandates to fit the current circumstances without compromising their power. The growing number of staff and budget of the forestry departments, despite considerable forest loss, is a case in point.¹² The mining and

12. As of 2007, Forestry Departments (RFD and the National Park, Wildlife and Plant Conservation Department) alone accounts for 63% of the total budget allocated to the 10 departments in the Ministry of Natural Resources and Environment (Mingsarn et al. 2007).

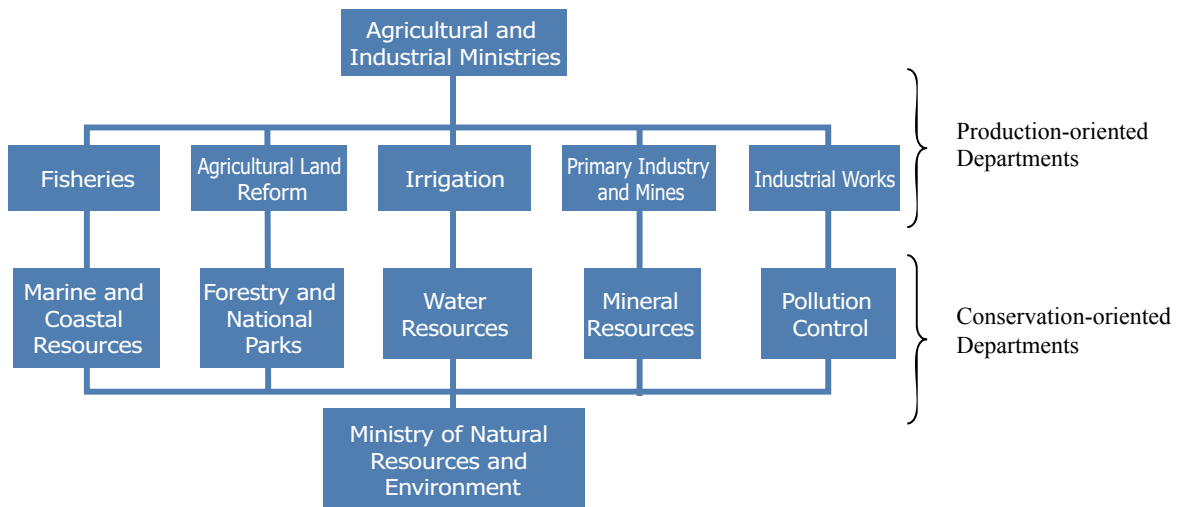
forestry departments, which have both lost their original mission to produce efficiently, have now shifted their emphasis to tourism, research and conservation without having to face a serious organizational downgrade.

We also find that some of the older departments have moved repeatedly among different ministries. The RFD, for example, has moved through four ministries in the past 100 years, reflecting the changing notions of what aspects of a “resource” are worthy of attention and thus required governance in each period. For example, during the economic recession in the 1920s, the departments for both mines and forestry were housed in the newly established Ministry of Economic Affairs to make an even greater contribution to the state’s revenue stability. This demonstrates that the state’s expectations for resources can vary depending on the circumstances and technologies available.

State governance has progressed from seeing resources simply as commodities with international trade value to developing resource infrastructure (e.g., irrigation) to improve productivity, and finally to establishing reserves for underground water, air, and ecosystems (e.g., national parks). Exclusive state control of these resources often competes with property, health, and access to public goods by local people. We may say that the state has constantly found new avenues through which to influence people through the transformation of the environment into various natural resources.

Addition of departments, however, does not mean that all of the departments enjoy equal importance in policy implementation. To see the effects of environmental administration, one must grasp the structure of environmental bureaucracy. Figure 2 is one such attempt to locate the conservation-oriented departments in parallel with traditional production-oriented departments in the same sector.

Figure 2. Typical departmental pair-up as of 2002



Source: author.

As Figure 2 demonstrates, new departments belonging to the Ministry of Natural Resources and Environment are mostly conservation-oriented agencies with the primary mission of conducting research and planning. Most of these have a parallel body within the production sector, often with *de facto* veto power to block actions. The RFD and the National Parks Department are the only exceptions, since they hold significant amounts of land on which certain production activities (such as plantations and tourism) take place. The exact mechanism of non-cooperation among these departments will help provide an explanation as to why elaborate provisions for environmental improvements often fall short of their target.

3.4 Inter-departmental oversight

Let us examine how the present form of bureaucratic division of labor can harm the environment and society. Under the Enhancement and Conservation of National Environmental Quality Act B.E. 2535, the Pollution Control Department (PCD) has a mandate to monitor the quality of air and water from non-industrial sources around the country; they do not have the authority to stop a polluting factory. Factories follow a separate legal scheme under the Factory

Act administered by the Department of Industrial Works, whose cooperation is indispensable if the state wishes to reduce pollution. As Mingsarn *et al.* (2007: 47) pointed out:

...as industrial plants are concerned, a pollution control official can only act after notifying DIW officials and the latter has failed to take action. Since there is hardly an occasion where DIW or its provincial industry offices can be said to have failed to act completely, the Environmental Inspection Division of PCD, and its provincial arms, the provincial natural resources and environmental offices (PNREOs) and the regional natural resources and environmental offices (RENREOs) have little power over the monitoring of industrial pollution in practice.

A similar relationship can be found between the Royal Irrigation Department and the Water Resources Department; while the former has authority over all irrigation projects, including large-scale dams, the latter has the mandate to plan and conduct research on water resources in general. Since the most important water sources in the agricultural sector are in the hands of the Irrigation Department, the Water Resources Department has no direct leverage to enforce its plans.

Mining is another area in which inter-departmental conflicts are triggered, typically in favor of the investor and developer. Salt and potash extraction in the northeast, for example, has become a major growing business in the northeast of Thailand. Industrialization requires “salt,” which is indispensable for the food industry and fertilizer production. The Minerals Act was amended in 2002 to allow the state to mine rock salt underground at depths of over 100 m without having to seek permission from the land owner. The problem is that the other salts accompanying the potash extracted for fertilizer amount to five times the domestic demand (Green Line 2011). So far, departments within the Ministry of Natural Resources and

Environment have not found an effective way to curb the side effects of potash exploitation, although the environmental impact is clearly visible.

Conservation-oriented agencies are not necessarily always placed in an inferior position. For example, the RFD, whose original mission was to produce timber to supply revenue to the state, has transformed its mission to conserving forest land and has often exercised its veto power against the Agricultural Land Reform Office, which is mandated to re-distribute agricultural land to the landless poor (Sato 2000). Despite the ban on commercial forestry since 1989, the RFD still holds roughly 40% of the total area of Thailand as a “forest reserve,” a legacy of the original monopoly on forests by the state. Because land for re-distribution can only be found in this “reserve,” these two agencies have often been in conflict with each other (Werachai and Kasemsun 2010). Because the RFD legally occupied the reserves first, it is in a stronger position to negotiate which land should be handed over for land reform.

The public becomes organized and resorts to court action when the government’s reach exceeds public tolerance. The Mab Ta Put industrial estate on the eastern seaboard is a case in point, in which an administrative court made the first decision to halt 76 new investment plans based on the 2007 Constitution (Funatsu 2011). The eastern seaboard development was a national economic priority for Thailand since the 1980s, yet a high concentration of petro-industrial factories has worsened air quality in the region, igniting citizen protests against the factories. Because the Department of Industrial Works has oversight of industrial estates, the Pollution Control Department has little influence on the environmental impact of factories within the estate. The continued environmental deterioration in the area proves the point that industrial estates, despite being given special environmental rules and regulations, served as safe havens while national pollution control agencies had little direct influence over their activities.

The recent emphasis on public participation in resource governance has helped to create non-state constituents for resource planning agencies. The Water Resources Department for example, followed the various steps of consulting with the public and experts, involving more than 3,000 participants, in the process of drafting the Water Act (Unger and Siroros 2011). While increased public participation in resource policy is a welcome move, the politicized nature of the water agenda ended up polarizing the public into two camps, both beyond the control of the department, and invited a stalemate in policymaking. Consequently, like the Community Forestry Act, the Water Act has been off the table for too long, despite there being sufficient awareness and public participation in the issue.

In short, new departments not only enhanced the state's "already substantial capacity to manage and degrade the environment, but also led to increased intra-state tensions over the state's development and stewardship roles" (Bryant and Bailey 1997: 68). These intra-governmental oversight and conflicts have often resulted in *ad hoc* ministerial agreements or cabinet resolutions that only help to put out the fire temporarily.¹³ Unger and Siroros (2011), who reviewed the legislative process of creating community forest and water acts, concluded that despite elaborate participation procedures, "Diverse interests seem not to converge to deliberate and compromise, but to identify targets of opportunity for derailing policy initiatives in a sequential policy process susceptible to a host of informal vetoes" (Unger and Siroros 2011: 224). The polarization of the public is also an opportunity for the bureaucrats to let civil society and NGOs represent their interests.

Intra-governmental oversight is not limited to the center. Local authorities consisting of elected members have increasingly been given the authority to control natural resources since the Decentralization Act of 1999. Since then, environmental policies must be analyzed with explicit attention to the local government, i.e., the Tambol Administrative Authorities.

13. One must not forget the important influence of donor communities in developed countries, which often facilitate the creation of new units to take care of projects that they bring in from outside. Climate change (a unit for which is now included in the Office of Natural Resources and Environmental Policy and Planning) is a typical area for which new funding is increasingly becoming available.

However, with governors nominated from the central Ministry of Interior, as well as the reluctance of departments to hand over key responsibilities to local authorities, local environmental politics has become another domain of state inaction; local authorities are forced to cope with various environmental problems with little power and few resources transferred from the center. The transfer of management rights to the local authorities, if conducted properly, will encourage area-based planning closely connected to the needs and demands of the local population. In practice, however, decentralization has not resulted in an actual devolution of power. Except for a few local authorities with rich financial and human resources, most communities are under the influence of provincial governors who are not publicly elected, but assigned by the Ministry of Interior.

Increasing layers of decision-making initiated by the government has ended up restricting their ability to implement policies set at the national level. Where capable municipalities and industrial estates exist, the present system might work. However, giving priority to infrastructure development and income generation projects over long-term conservation has been the common practice, particularly among the local politicians. Decentralization, where effective, seems to have come with its own costs.

4. Conclusion and policy options

Why did it take more than 17 years for Thailand to finally legalize a community forest bill which gives the right to manage forests which had been used by local people for a long time anyway? Why does the Water Act have to face an informal veto at the final stage even though an elaborate process of public hearings had been carried out? This paper has given partial answers to these perplexing puzzle that frustrated many observers by identifying a historical evolution of the state agencies.

The conclusion can be summarized in two points. First, inter-departmental conflict has historical roots that have shaped the present policy environment. New mandates and

responsibilities are continuously added on top of the policy space. Because the Thai government established vested interests in the field of production in its formative period in order to expand commercial activities and generate revenue, more recent mandates to conserve resources were left with little room for maneuvering. The late-coming departments are often pushed into fulfilling mandates that limit them to the area of research and planning, with little authority to enforce regulations. This asymmetric division of labor not only induced policy inaction among the departments who dared not step into the territories of other departments, but also provided a safe haven for production-oriented departments.

Second, bureaucratic competition is often controlled by pre-existing veto players within the government—i.e., those who now belong (and originally belonged) to the production sector and developed strong vested interests in the status quo. The way bureaucratic division of labor occurs gives us hints on why innovative institutions perform poorly. Environmental projects that ultimately aim to regulate production must identify the key veto players and incorporate them strategically from the outset if they are to advance their objectives. The simplistic but popular argument that we can “grow rich and clean up later” can be a convenient excuse for governments to delay politically challenging reform which does not necessarily provide rents to the constituents. Evidence has started to emerge that many countries do not follow the environmental Kuznets curve (Ruoff 2009). The process of economic growth accompanied by institutional layers of interest makes *ex post* clean-up of pollution or a more sustainable use of resources more difficult. Building a coalition with veto players earlier is certainly challenging, but is the only way to get around the problem.

Although these conclusions are drawn from the history of Thailand, I believe the implications are far-reaching, extending to the countries now in the process of integrating environmental concerns in their development policies. Because Thailand is a middle-income country still struggling to meet basic infrastructure needs, lessons from Thailand can be usefully applied to countries in the early and middle stages of economic development. For

countries in the early stages of economic development, such as Laos and Cambodia, Thailand's case highlights the importance of integrating conservation concerns from the outset as an organic part of legislation related to economic policy and the bureaucracy involved. Thailand's lessons suggest that middle-income countries such as Indonesia face severe challenges and limitations on what can be achieved by relying solely on state policies, which are structured and dominated by the production-oriented sectors. Evidence from complementary studies carried out in other locations is also needed before one can assess whether the results from Thailand are part of a broad systematic pattern shown in environmental administration elsewhere, or whether the results are specific to Thailand.

One of the study's policy implications is that environmental policy should shift from an emphasis on functional divisions within the government, to regional implementation at the provincial and inter-provincial levels. Area-based resource management was, as we saw, the way in which Thailand started its modern management. This shift, which is in line with the decentralization initiative, will undoubtedly give more discretion to the Ministry of Interior and the provincial governors, who are well connected with development-oriented industries in each locale. The key is to shift the focus of attention from the national policy level to the local level, where real inter-departmental cooperation is needed to address the problem.

Many policy instruments have been recommended in the past to improve environmental quality in Thailand with very little follow-up or implementation. It is often not the lack of awareness or shortage of financial means, but a lack of resource governance: the societal ability to invoke, nurture, and combine appropriate means to realize its goals. We should not always simply strive to propose better policy options, but also try to understand why similar attempts have failed in the past. This step will enormously reduce transaction costs of various kinds. Analysis of cases where veto players have been successfully circumvented to materialize conservation policies are subjects for future research.

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Abstract (in Japanese)

要約

本稿は、タイを事例として 19 世紀末にその端緒を遡る天然資源行政の発達形態が後発の環境行政の実効性を制約していることを、行政史および部局間の利害分析から明らかにする。環境問題は、しばしば新しい制度や組織の新設をもって対処される。しかし現実には、実質的な権限が問題の発生源となっている生産部門を統括する部局に保持されたままになっており、それゆえに後発の環境系部局は調査や計画といった、実効力をもたない業務に追いやられることが多い。途上国における環境政策の失敗は、行われた政策の成否もさることながら、本来行われるはずだった政策が、既得権の分布状況に縛られて不作為 (inaction) に終わることに起因している可能性がある。

援助機関が環境保全を強化しようとするなら、このような行政内部における利害関係を把握したうえで、生産部門の抵抗をあらかじめ予想した計画を立てなければならない。そのためには、早い段階で生産関連部局を巻き込むか、あるいは地方分権の潮流に合わせて内務省のような面的な統治をおこなう組織と協力した案件形成が求められる。