Redressing forestry hegemony - Where a forestry regulatory framework is best replaced by an agrarian one

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Redressing forestry hegemony - Where a forestry regulatory framework is best replaced by an agrarian one

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INTRODUCTION

Land use regulatory frameworks that are based on forest definitions that disenfranchise the smallholder agroforester threaten rural livelihoods. These definitions often favor large-scale plantations and fuel conflicts over land that can lead to a failure of both the plantations and smallholders to meet their objectives.

At the root of this problem is the abyss that conceptually and often legally separates agricultural activities from forestry activities with the local farmer, as forest creator, often loosing out to larger forest industry interests.3

This paper provides a critique of current forestlands definitions and delineations. Using Indonesia, Thailand and the Philippines as examples, we trace the historical underpinnings of how forest bureaucracies gained control of much of the land base at the expense of agriculture. We reveal how forestry regulatory frameworks in these countries have disempowered local agroforestry farmers.

We address the question of when land use requires government intervention through regulation and when such interventions are counter-productive. This question is placed in the context of when does a farmer or farming community’s land use carry off-site environment responsibilities that require state regulation and when do they not.

An important distinction we draw is between land use that falls within a forestry regulatory framework and land use that is managed within an agrarian regulatory framework. The latter, in most countries, generally regulates through systems of incentives/disincentives and market access, while the forestry frameworks generally regulate land use for environmental management and sustainability, even in the natural production forest settings. This is not to say that land use within an agrarian framework does not provide environmental services. The distinction is that, unlike forest areas, those services require substantially less government regulation.

An important policy problem arises when farmer-grown forests that have no public environmental services, or regulatable environmental off-site services, are classified as state forestland and therefore under a forestry regulatory framework. A direct result of this is reducing farmer options for managing their landscapes to increase production and income. This occurs when lands that logically belong in the less regulated agrarian framework are irrationally gazetted by the state as permanent forest estate.

This paper traces the history of this process in Indonesia, Thailand and The Philippines and examines processes of rationalization that are, at varying stages of development, underway. We collected and analyzed data on current and historical land classification and looked at general realities on the ground in terms of agriculture and forest cover. Lastly, we examine the impacts this imbalance has on small holders, particularly constraints that emerge for investments into agroforestry systems. Of the three countries, Indonesia receives the most attention. Thailand and the Philippines,

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3 In many parts of the world, farmers create productive mixed-species forest gardens, see Khas agroforestry Indonesia, Consulting the spritits, (Philippines), (Thai example)
while sharing a similar history of forestland classification becoming dominant over agriculture, are at a more advanced stage in dealing with the classification imbalance. In this paper, their stories are presented to augment the Indonesian experience and to demonstrate that the classification imbalance is not unique to Indonesia.

Definitions:

A Forestry Regulatory Framework, as use in the paper is defined as areas of the land base that require a relatively high level of state regulation or at times intervention. These are areas that often defined by law, as being the management responsibilities of government due to environmental and production interests that benefit that nation as a whole. This does not mean that these lands are in all cases owned by the state or “public” lands, but in tropical countries this is generally the case. In this paper we are introducing the term, “Regulatable Public Environmental Functions” to refer to the primary reason why certain areas of the land base may best be regulated in the forestry context. We also recognize that production services are currently a central element most forestry regulatory frameworks but we see this as transitory. The natural production forests in the Philippines and Thailand are exhausted, and it is likely that they will also soon be gone in Indonesia. Industrial production forestry will be limited to tree plantations. The question of whether plantation forestry on state or private lands is best placed within a forestry regulatory framework and not an agrarian one is commented on but no fully addressed in this paper. This paper also assumes that degraded or secondary natural forests can be considered as within the regulatory responsibilities of the forest agencies unless it can be demonstrated they provide no regulatable public environmental service.

An Agrarian Regulatory Framework as used here, requires little direct regulation due to the land in question not providing “Public Environmental Functions”. Although activities such as pesticide use and effluent and nutrient run may well be regulated. These are non-urban, non-forest and generally rural lands. They are most often privately held. Agrarian is not synonymous with agriculture. It is defined as relating to land or landed property and generally emphasizes freedom of choice by the land owners (individual or communal). Agrarian places greater emphasis on society’s relationship to the land and not use agricultural production. Over time, it has also taken on a political tone (agrarianism) that voices a need for more equal division or equitable distribution and land and the benefits derived from land. Thus, significant social transformations have often taken place through agrarian reform rather than agricultural reform. In the historical sections of this paper, agriculture is used in the context of a land use within an agrarian context.

As a tool, we are saying that in countries struggling with great imbalances between elements of society, in terms of assess to and control of limited resources, an agrarian regulatory framework provides far greater opportunities for state-society transformation than does and forestry framework in the countries looked at.
FORESTS: AN HISTORICAL PERSPECTIVE, ORIGINS OF THE AGRICULTURE AND FORESTRY IMBALANCE

It may come as surprise to some that forests have not always been directly related to the presence of trees. But they have nearly always been domains bounded by tight regulations.

The modern definition of forests as referring to trees, is so widely accepted now that we collectively tend to minimize the historical legacy of a forest tradition where forests were primarily defined by strict rights of property, access and utilization of land, regardless of how many tree are on those lands.

Forestry tradition, as it emerged in Western Europe dates back to the Middle Ages. Its construction is both founded on blended representations and ideologies and rooted in historically and politically shaped relations of power and production. This initial section, presents how the cultural and ideological views of forests in Europe have influenced the present situation of forestry in tropical countries. By tracing the formation of social and political relations in forest management and control in Europe, we explore how the justification of forestry regulations and practices has been constructed. We give particular emphasis to those relations involving conflicts between landlords and peasants, and more pointedly, those between agriculture and forest, to explain the formation and the consolidation of the imbalance between forestry and agriculture.

Forest: a distinct domain

In the early ages of the Central European history, when the land was still covered with trees, rural life was constructed around the “silva” (literally: a place bearing trees). Silva was defined in various ways not according to vegetation criteria, but to its use or its origin, (how did it get there). Eventually, in addition to wood lots designed for the production of timber, poles, or firewood, it included bushy lands for grazing as well as fallows and places opened for permanent cultivation. Most of the silva was owned by the local monarch and the two dominant classes of landlords: the vassals of the sovereign (the nobles), and the monasteries (the clergy). Common people (the villeins and the serfs) were usually bound to a landlord, and granted only restricted usufruct rights on the silva lands. 4

In this feudal world, “forest” (foresta) did not exist as a natural entity. Forests were instituted and demarcated as a particular domain in the silva, reserved for the hunting pleasure of the dominant classes5. These historical origins of forests, as not having much to do with nature or ecology, are important to appreciate. They refer both to the symbolic and social relations of power, and specifically, to privilege and exclusion. In its genesis, and beyond its symbolic value6, the foresta constitutes a legal category of resource management. It was also a political act aimed against peasants and their practices and against the agrarian context where agriculture and rural life in general was highly dependant on silva.

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4 Silva, a generic term referring to ......; opposed to......
5 (“a tract of wooded land in England formerly owned by the sovereign and used for game”
6 Harrison
The early divide between forest and agriculture

The divide between agriculture and forestry in Central Europe began in the early middle ages and has been politically constructed through centuries of forestry rule or hegemony. The institutionalization of *foresta* for the privilege of the king fueled a forestry ideology where local farmers are the ever-present enemies of the forest, making agricultural the rival of the forest interests. This representation was reinforced by centuries of conflicts between landlords and serfs, between foresters and peasants. Indeed, when confronted with the reality of pre-industrial agricultural practice, the forest/agriculture imbalance constituted a contradiction. *Silva* was in fact essential to many rural economies and livelihoods, as well as to the functioning of agriculture (field culture and cattle raising). Similarly today, this division and imbalance still continues to be problematic in most of rural situations in the tropics.

However, when considered from the point of view of the landed elite, the exacerbation of a legal divide between forest and agriculture is logical and strategic. It constitutes the most efficient way to protect the forest domain from land peasant encroachment. With population growth, farming pressure on land defined as forests has consistently increased. In the meantime, usufruct rights granted to peasants appeared as a burden to landlords, who wanted full and exclusive control of their forest domain. From the early 14th century, forest regulations were aimed at restricting the provision or the exercise of usufruct rights, while peasants struggled to convert more lands for their fields, use more resources for their cattle and more firewood for their houses.

For centuries, the imbalance between forest and agriculture has been grounded in this discord between peasants and landlords. It reveals a fundamental rivalry between peasant forests, managed for subsistence through harvesting and grazing, and the forest of the landlords, managed for power, pleasure and rent seeking. At the dawn of industrial revolution, the justification of the divide switched to the grounds of ecology and technical forest functions with the development of the scientific forestry and the emergence of rational silviculture. It also displaced the crux of the conflicts from a peasant/landlord dichotomy to a farmers /professional foresters axis. The scientific construction of the discourse on the forest services in soil and water protection and later biodiversity protection attacked the negative “public” impact of local agricultural practices on the environment. It brought legitimacy to the eviction of peasant from the “forest domain” where forest experts became the dominant management voice. The emergence of this rationale is important for the understanding of current tropical forest management paradigms, as it took place at a key moment -- the establishment of colonial forest administrations.

Forest as a regulated domain: Getting the upper Hand

This European vision of forests as the exclusive estates of landlords, then of foresters and forest agencies, distinct from peasant agriculture, has prevailed now for centuries.

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7 grazing… the cattle grazing in forest stands (specially sheep and pigs), firewood collection, and slash and burn practices
8 It is important to also recognize that such discord has played itself out in feudal agricultural practices
9 Forests had to be managed in order to maintain soils and natural equilibrium in a whole region, protect nature and the quality of life, avoid damages from running rainwater and other climatic hazards.
Today, while in many parts of the world, forests are defined broadly as places with some degree of tree cover or potential tree cover, they are still often regulated and managed as the exclusive privilege of modern powerful public and private (most often large corporate) institutions.

The creation, the demarcation and the maintenance of a reserved domain with restricted use that excludes the majority of potential users, in feudal Central Europe, and then following the creation of the European States has, in many cases, been reproduced in tropical countries. The development of forestry regulation in many parts of the world cannot be separated from this socio-political and historically contested dimension of forest lands creation, control and management.

In order to succeed as a viable land use classification, the creation of forests as a domain distinct from agriculture requires a bundle of rules and regulations concerning access, use, control and sanctions. Maintaining the integrity and the quality of forest domain also requires the creation of a social contract that controls the enforcement of these rules. “Forestarii” appeared with the institutionalization of the “forestae”, with the specific mission of protecting the forest domain from the incursion of the villeins practicing poaching and other types of damage. The first royal corps of forest administrators in Europe was created in 1290, to “defend the royal rights of hunting and justice”, and, later, to restrict the delivery of usufruct rights to peasants. The function of the first “Maîtrises des eaux et des forêts” included control and police over the circumscribed domain and dispense of justice. In addition to enforcing law and order, foresters started administrating forests in a more technical way when the fear of land shortage due to population expansion arose, in the 15-16th centuries.

For a long period, the administration of the forest domain was essentially negative and repressive. Starting with Colbert in France (mid-17th century), it was encompassed in a more constructive manner, with the concern of developing and harmonizing silvicultural practices in order to ensure sustained production. From this time on, forestry was institutionalized in a legal, administrative and technical regulatory framework. Forestry endorsed the complex mission of regulating, administrating, managing, conserving and cultivating the forest domain. The development of scientific forestry in the middle of the 19th century legitimized the mission of foresters, and established the exclusivity of professional foresters in forest administration, management and plantation. This historical construction helps to understand why, in our modern world, forest regulations throughout the world consist of a subtle blend of legal measures aimed at banning, prohibiting or restricting access and use as well as at defining fines, with territorial instruments facilitating the delineation and classification of the forest domain as well as the control of local communities, and technical prescriptions aimed at controlling and systematizing the exploitation, regeneration and plantations of forests (including details on species, spacing, rotations, etc.).
Forest and Public Concern

The first attempt to link the concept of “public interest” to the forest domain is quite ancient. The first official document that mentions this in France dates back to 1518\(^\text{10}\), where it is clearly stated that forest management is ultimately aimed at “benefiting the State and the subjects of the king”\(^\text{11}\). From their early ages, foresters were the custodians of public welfare. This prevalence of the public interest in forest management survived throughout the privatization of the French royal forest estate. Post-monarchic forestry regulations in France and Germany were aimed at submitting the independence of private forest ownership to restrictions commanded by the “obvious general interest”. With the emergence of scientific forestry, the forestry rhetoric on the public interest was renewed through the introduction of nature protection concerns, which we, in this paper, call “regulatable public environmental services” of the forest. Forests had to be managed not solely for production reasons, or for the public welfare, but also for environmental welfare (ultimately for the “public interest” as well).

Forestry in the tropics: the Construction of Today’s Reality

The historical legacy from Central European forestry is essential in the construction of the forest sector in the tropics not as much in terms of knowledge than in terms of framework and administrative objectives. Representations and ideologies, which had funded European forestry, were exported to the tropics by colonial foresters and administrators, together with ideas about what was appropriate from European experience. The long-standing tensions between foresters and farmers, combined with the burgeoning fashion of romanticism and nature conservation, shaped the negative perception of native agriculture (in particular shifting cultivation) by forest professionals. Specialized knowledge in tropical forestry shaped the discourses on deforestation and rational exploitation of ancient forest stands. It was then codified into the legal and policy instruments of colonial administrations, which in many ways replicated the regulatory framework of forests in Europe. However, as forests were still wide, the forestry authorities played a major role in the broader issue of land control and administration. In Indonesia, for example, much of the land base has been often partitioned into “protection forests” or “production forests”, with little room left for local agriculture. Ignoring the reality of local production systems, often tree-based, colonial foresters started to exercise their control over what local farmers were allowed to do and not do.

The new States that emerged from the colonial period adopted most of the colonial regulations concerning forests, as these provided the most readily available basis for the expansion or consolidation of State control over resources and land.

Practiced on such a large scale, and with heavy regulations, forest management can be considered as both an instrument for controlling land and labour. The “long hand” of

\(^{10}\) François Ist, Dispostion de 1518: “admonestons tous priiinces..... de veiller à l’entretien de leurs bois, de sorte que..... inconvenient à la chose publique et aux sujets de notre royaume. we order that all princes, .... churches, ... manage their forests ... for the public

\(^{11}\) This benefit referred both to the economic sphere (the “needs of the society”) and the strategic importance of forests for the integrity of the State (construction of warship, defense of the national territory)
the forestry administration and regulations over a dominant portion of a nation’s lands – including much of the customary lands, has been widely criticized by social and political scientists, as well as by human right organizations. However, the development of the environmental discourse has brought a new legitimacy to the forestry sector. Whatever the local concerns of justice and welfare, a large proportion of the forests still have to be regulated because of the “public environmental services.”

Tropical forest plantations represent a particularly problematic domain in forestry regulations. Similar to natural forests, they are subjected to the prevailing legal forestry regulatory frameworks. This means farmers and village access to land for forest plantation development is highly regulated. The forest plantation sector is heavy with specific technical, organizational regulations and often state subsidies, grounded in strict representations of what a planted forest plantation should be and who will benefit from its output. These regulations often determine the species that can be planted, the spacing patterns, cultivation techniques and rotations. They promote a unique model of highly specialized and intensive cultivation of trees, on large areas, and for a single purpose: the production of wood for either timber or fibres for pulp. The promotion of this model is based on the construction of a scientific argumentation (mainly built on technical and economic considerations) which asserts that, due to the technical difficulties linked to tree planting and to the financial demands of plantation establishment, smallholder forest plantation is not viable, and therefore not supported.

This narrow conception of planted forest does not accommodate many existing examples of agroforest developed by smallholder farmers on their agricultural lands. Even more serious, it often prohibits farmers from benefiting from forests they themselves created. It is not unusual for regulations to forbid the marketing or even the transportation of timber and farmers are taxed for planting tree-based products as if they are from natural forests and therefore the patrimony of the State.12 All of this occurs because tree plantations and the lands they are on, are regulated as forestlands for tree production. The establishment of tree plantations is often required by the government, irrespective of the conflicts with local communities these policies bring about and the loss of opportunities for increasing food security and local incomes by de-regulating land use in these areas.

COUNTERPRODUCTIVE IMPACTS OF THE SECTORAL IMBALANCE

In many tropical countries, forests today are defined more often by legal and administrative designation than by the actual quality and extent of tree cover. Official designations of forest areas often ignore the forest-based activities of local communities particularly the quality of their agricultural or agroforestry practices as well as their basic rights to their land and other resources.13

Not only local people’s knowledge on forest management and culture is ignored, but local forest management systems within what the state defines as the permanent forest

12 CITE NZ PAPER
13 cite balancing acts, PER publications, boundaries paper
estate, is often deemed illegal\textsuperscript{14}. The delineation of national permanent forest estates in most tropical countries transforms local communities into squatters on their own land. Present forest regulatory frameworks often aid in the destruction of productive and environmentally sound community–created forests and management systems and constitute disincentives for tree growing by farmers. This is particularly true in Indonesia, the Philippines and Thailand\textsuperscript{15}.

Current definitions of “natural forest” and “planted forest” leave little room for farmer or community-created agroforests.\textsuperscript{16} Reforms in land use regulation are needed to reverse these disincentives and create a more enabling environment for the proliferation of indigenous forest-creation approaches. These changes would lead to re-examination of the utility of current forest regulatory frameworks as they relate to farming communities and the development of a forest management paradigm that is based on sharper criteria for forestlands designation and their regulation. Sharper criteria for determining just what forest lands need to be regulated and how, and which forestlands do not require state regulation and can more efficiently be placed within an agrarian regulatory framework where sustainable production is the priority and not the maintenance of forest environmental services. Treeless lands within the permanent forest estate and those that are planted by local people and have no external public environmental services should logically fall into the latter category. There is little need for state intervention through land use regulation. For example, these areas require no greater level of regulation than wetland rice fields.

This counterproductive imbalance between forestry and agriculture is perhaps the most significant barrier to what can be termed as the potential for a re-greening revolution, where millions of farmers, when provided the right incentives, will have greater motivation and opportunities to transform degraded and under productive landscapes into productive and often tree-based agricultural systems. An ICRAF paper presented at a recent meeting of the United Nations Forum on Forests on planted forests identified additional constraints to the emergence of a re-greening revolution. These are: (1) issues of terminology for forests, plantations and reforestation are linked to land tenure and land use restrictions; (2) access to high quality planting material of proven suitability remains a challenge, especially at the start of a farmer-tree-planting phase of a landscape. (3) management skills and know-how often constrain a farmer’s ability to produce tree products with high market values. (4) over regulation often restricts access to markets for farmer grown timber and tree products, partly due to rules intended to curb illegal logging from natural forests or government plantations. (5) there is a lack of reward mechanisms for environmental services provided by agroforestry.\textsuperscript{17} When addressed, these would lead to a paradigm shift where these agroforests and lands on which they are planted would be de-regulated, taken out of the forestry regulatory framework and treated as agrarian systems that would benefit from extension support and require little regulation.

\textsuperscript{14} cite balancing acts
\textsuperscript{15} need citations here
\textsuperscript{16} cite New Zealand paper here
\textsuperscript{17} note meeting and list constraints
Implications for Food Security and Local Livelihoods

Sharper definitions of landscapes that need to be managed within a forestry regulatory framework and those that do not would also likely have significant positive impacts on both food security and local incomes. The removal of land use restrictions in areas where such restrictions are not warranted would lead to increased options for local farmers. It is not unusual, for example in Indonesia, for horticultural crops planted in areas classified as forestland to be deemed illegal by the forestry bureaucracy. Even fruit trees and many palms are classified as non-forestry species allowed only on non-forestry land. On Java, local planting of hardwood species such as mahogany and teak or even softwoods such as pine is highly restricted and actively discouraged by forestry officials. In this case, the forest bureaucracy restricts land use even on private land with the intention of controlling the marketing of these species and stopping wood theft from state-owned plantations. This assumption is that when a farmer has harvested teak, that it was stolen from the plantation. On Java, 23% of the land is controlled by forestry. Conflict over access to land reserved by government for timber planting is broad and increasing. Much of the “forest” lands are lowland production forest plantations that serve no public environmental function. A significant part of these lands are not forested and are the setting of a “tug of war” between the forest plantation managers and land-hungry farming families.

Food security in Indonesia has long been a central societal and increasingly, a political concern. In a recent interview, Ron Cantrell, the Director General of the Philippines-based International Rice Research Institute, estimated that “Indonesia needs extra rice production of 10% a decade for the next 30 years is needed to deal with population growth and urban land pressure. And while education, job opportunities and infrastructure are also needed to reduce poverty, in Indonesia rice comes first”. He also went as far as saying that increasing household food security must be linked to efforts to addressing increasing terrorism in Indonesia. The volume of rice traded on the international market a year amounts to approximately 30 million tones. Indonesia alone consumes 20 million tones. It would therefore be impossible for Indonesia to rely on the global market for its food security. The question remains, from what land will Indonesia’s increasing demand of rice and other staples come and the related question, why, in a country with increasing rice imports and decreasing food security, does the government reserve 73% of the land base for forestry activities?

TROPICAL FORESTRY: STATE REGULATORY FRAMEWORKS VERSUS LANDSCAPE REALITIES

This section examines under what circumstances and through which mechanisms, “forests” need to be deregulated in order to efficiently support and promote smallholder forest creation and management. To do this, it is important to begin by exploring when is state intervention on land use and forest management justified.

18 cite rich forests poor people
19 Radio Australia 12/2/2003
20 Will food security get trampled as the elephants fight over agriculture? Aileen Kwa: Focus on the Global South
Forestry and “Regulatable” Public Environmental Services

Forestry regulations are rules prescribed to control the use of forest resources and to assure that the management of these resources conform to government-defined standards. Forestry regulation in the tropics is, with few exceptions, the responsibility of centralized government bureaucracies and carried out with the fundamental purpose of maintaining forest’s economic and environmental services. As highlighted earlier, “permanent forest estates” in many tropical countries are often the legacy of colonial or European inspired management approaches that are based on forest area gazzetment and the exclusion of people from these areas. There is a growing body of literature that challenges the legality of these processes and evidence is growing that the rights of communities who lived in “forest areas” prior to gazzetment have been violated.21 Yet, even leaving aside the legal questions of state control over forestlands, an examination of biophysical and economic justification for this control reveals a string of false assumptions and myths upon which the justification is based. In Thailand, Indonesia and the Philippines, the largest myth is that there are significant areas of forests on forestlands. For example in Indonesia, 24 million hectares, of production forest, (nearly ¼ of the permanent forest estate), has no forest cover.22 These are largely lowland areas that have no significant (regulatable) watershed services. Statistics for the Philippines tell a similar story.23 Over the centuries, millions of hectares of tropical forest have been converted to agriculture, (including tree-based systems), yet, in most Asian countries, most of these lands remain under the jurisdiction of forestry agencies that restrict land use in the name of protecting forest services that no longer exist. This is has led to broad conflict and a loss of opportunity for food production, livelihood enhancement and poverty reduction.24

The challenge in many tropical countries today is to define, identify and gazette, for their sustainable management, areas of the land base that have genuine public environmental services that require state intervention through land use regulation. Obvious areas are natural forests for protection of biodiversity and management for production and watersheds for the protection of hydrological functions. Should these management imperatives become central government priorities, as opposed to including non-forested areas that carry no public environmental function, the potential for a more rational and better-managed permanent forest estate would increase. Community lands that carry no public environmental services would fall within the agrarian domain and farmers would be supported to improve land management, increase production and raise incomes through better market access.

The following are three examples of where this forestry/agrarian rationalization is particularly needed.

The Philippines

More than half of the Philippine land base is designated as “forestal” or falling within the “public domain” although only a fraction of these lands are forested. This was carried out through a 1981 Presidential Decree during the Marcos period that arbitrarily designated all Philippine lands above 17% slope as state forest zone or

21 cite boundaries paper, FSC, DTE, balancing acts
22 cite planologi from harry’s paper
23 Cite FAO state of the forests report 1998??
24 See boundaries paper, Malaysian publication???
public domain. As a result, according to prevailing legal interpretation, approximately 15 million hectares, (just over half the Philippine land base), are the property of the State and under the jurisdiction of the Department of Environment and Natural Resources (DENR). The Philippine government, while the most advanced in Asia in developing a community forestry program, is still highly reluctant to concede that much of the “forestal” areas are neither forested nor does it carry any forest services that require regulation. As a result, the DENR continues to regulate more than half the land base for forestry, restricting land use to forestry activities and regulating farm products that are grown in these areas as if they derive from natural forests. Broad land conflicts also emerge when the DENR exercises its jurisdiction over these lands and awards large pasture leases to ranches, concessions to timber plantations, and mining concessions on lands claimed by indigenous cultural communities.

Today, the land markets and land use in sloping lands in the Philippines is shaped by these classifications. Land that is perceived to be “forestal” (nearly without exception planted forest, farms or grasslands) is significantly cheaper to purchase due to the difficulties of securing full title. What are the origins of these classifications? The answer is found in Philippines colonial legal history. The forestry/agriculture competition in the Philippines began in the early part of the 20th century and remains today a key part of the American colonial legacy. The US Congress, in the Philippine Bill of 1902, required the American colonial government in the Philippines to identify and classify agricultural land and to regulate the lease or sale of all land already classified as “public.” The notable exception was timber or mineral lands. In 1903, the Colonial Government enacted a Public Lands Act and in 1904 the Forest Act. As a result, “public” forests and minerals could not be privately owned. Only public agricultural lands were open to conversion to private ownership.

These acts set the stage for a competition between agriculture and forestry, a rivalry in the Philippines that lasts until today. When looking back at the development of the Philippine forestry regulatory framework, it is interesting to note that, like Europe in the middle ages, whether or not there were trees in these landscapes was not considered. Simply, all lands where no evidence was presented that they were agricultural, were deemed to be “forestal”. At the turn of the century in the Philippines, it is not surprising that no upland communities presented evidence of their land as being agricultural, thus the origins of the vast Philippine forest estate.

It is important to note that challenges to this indiscriminate classification of natural resources did emerge. In response, the Colonial Philippine Supreme Court ruled, in 1918, that “the presumption, in lieu of contrary proof, is that (public) mean agricultural lands”. This decision significantly strengthened the legal position of large numbers of Filipino families that the land they occupied, (often for generations) was indeed agricultural with private rights attached.

In 1939, the Colonial Philippine Secretary of Justice strengthened this ruling saying that, “In determining whether land is agricultural or not the character of the land is the

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25 Cite and describe PD 705
26 Lynch 1986: This section draws primarily from Owen Lynch’s seminal legal research on land rights and the Philippines colonial legacy
27 Ibid
test...it is the susceptibility of the land to cultivation for agricultural purposes by ordinary farming methods that determined whether it is agricultural or not.”

Ironically, it has been in consecutive postcolonial Philippines governments, that forestry bias has ascended and the pro-agricultural presumption has been challenged. The debate became centered on “burden of proof”. As the Philippine state developed and timber from natural forests grew in economic importance, (in tandem with the development of a power forestry bureaucracy), more and more lands were assumed to be within the public forest domain where no private rights can be attached.

Since 1936, the power to classify public lands as forestal as opposed to being “alienable and disposable”, a pejorative term meaning agricultural, has been in the hands of the DENR/forestry bureaucracy.

What would it take to see a “re-greening revolution in the Philippine uplands? The main constraint could well be that the government, as represented in the uplands by the DENR, prioritizes land use restrictions in these areas rather than land use development. The DENR in the uplands operates a forestry regulatory framework rather than one that prioritizes both environmental and economic development.

This is not to say that the DENR has not been, at times, committed to social or community forestry. Yet these efforts too have evolved under the basic assumption that all of the Philippine uplands carry public environmental services and only the DENR is positioned to regulated land use in the interest of protecting these services. All timber, including farm grown inside and outside of the state forest domain, is highly regulated and taxed under the assumption that it is wood extracted from natural forests.

But like Thailand, the Philippines is making progress in rationalizing the control over the Philippine “public domain”.

**Indonesia**

Of the three countries reviewed, Indonesia has the largest remaining areas of natural forest. But like the Philippine and Thai experiences, Indonesia has rates of deforestation that, unless reversed, commercially viable natural production forest will be depleted within this decade. Similar to the Philippines and Thailand, Indonesia has a large permanent forest estate, translated from Indonesian as “The State Forest Zone”. The Department of Forestry claims to have jurisdiction over 114 million hectares, making the percentage of Indonesian land classified as forests (72%), the largest of any country in the world. Common perceptions, as fostered by the Department of Forestry, are that these lands are:

1. largely forested;
2. provide Regulatable Public Environmental Services;
3. have been fully and legally gazetted with the forest boundaries clearly marked.

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28 Ibid
29 Cite World bank report from boundaries paper
Deeper examination of all three of these perception reveals that, in a large percent of the State Forest Zone, all three are myths. Using Department of Forestry data, it is clear that large areas are without forest cover, have no forest functions and have not in fact, been legally gazetted. Much of these lands are either agricultural, (including agroforestry) or imperata grasslands.

The Indonesian land use regulatory framework is based on forest definitions and delineation that disenfranchise the smallholder agroforester farmer. These have favored large-scale plantations and fueled conflicts over lands that lead to a failure of both the plantations owners/managers and smallholders to meet their own objectives.

The legal competition between agricultural land classification and forestry began in Indonesia when the first Forestry Law was issued in 1863. This law gave authority to the Forestry Department (*Boschwezen*) to control all natural forests. Traditional rights were implicitly respected only for areas not yet under the Dutch colony. In 1883, when the first Agrarian Law was enacted, no revisions were made to the Forestry Law and the seeds of land use classification conflict were laid. As a result, large areas were classified during Dutch administration as forestlands, often in direct violation of rights that were outlined in the Agrarian law.30

After Indonesian independence, in the 1960, the current Basic Agrarian Law was enacted. The law recognized previous ownership rights under both customary and Western systems, but provided a new certification process under which land were to be surveyed, mapped, and registered. All unclaimed land reverted to government ownership. Land certification, however, was not compulsory and registration was still far from complete by the end of the 1980s.

The 1960 Basic Agrarian Law was a bold effort by President Sukarno to modernize Indonesian landownership. It differed significantly from the Dutch Agrarian Law in that the legal basis for the state to own land was changed and indigenous land tenure systems were included as a central basis of the law. Land registration and titling were initiated, although not with broad impact, and all unregistered land remained in the hands of the State. Control over lands classified of forests through the Dutch Forestry Laws was still the priority of the Indonesian foresters who played a central role in preparing the Indonesian Forestry Law in 1967. In this law, indigenous forests and other lands are legally classified as state land. Though the Forestry Law was revised in 1999, there has been little improvement in terms of tenure rights or addressing the reality that large areas of the State Forest Zone is agricultural.

The forest bureaucracy was initially a division of the Department of Agriculture but as it gained increasing control over the land base it became a separate Department. While still part of agriculture, it began to consolidate control over forests and non-forested lands in the early nineteen seventies when regulations were developed on forest utilization and timber extraction licenses awarded to private companies. In a pivotal move that gave forestry the upper hand, the government issued the 1974 regulation on forest planning that gave authority to the Directorate of Forestry to define what is state forestland is and what it is not.31 It should therefore not be surprising that when the forest bureaucracy was tasked to determine how much land it

30 Cite Boundaries paper and others??
31 Government Law (PP) no.33/1974
believed should be under its jurisdiction, it responded by claiming jurisdiction over roughly three quarters of the nation.

**History of Forestland Gazzetment**

In the 1980s the Ministry of Forestry developed scoring criteria used to define the State Forest Zone for the outer islands. This process was termed the *Tata Guna Hutan Kesepakatan* (Forest Land Use by Consensus). The criteria developed were based on the existing forest conditions, water and soil conservation and national and local social economic interest. There were several indicators: forest vegetation coverage, topography, and type of soil, climate, and community development.

The main three biophysical indicators, in order of priority, were slope, soil type, and climate. While the policy for scoring mentions social and economic criteria, none were developed and therefore were not taken into consideration in the scoring process.\(^{32}\) Certain areas were classified as Protected Forest (soil and water conservation) if the accumulated score warranted this and slope more than 45% and/or elevation was more than 2000 meters.\(^{33}\) Also during the process of classifying conservation forest, important species or ecosystem to be protected and potential for tourism were considered.\(^{34}\) Remaining areas that were classified as Production Forest or Conversion Forest where the Department of Forestry determined that certain lands within the State Forest Zone no longer had forest functions.\(^{35}\)

Addition research has revealed that when measured against the forest gazettement procedures defined by the government, the vast majority of the State Forest Zone has not yet been legally and administratively gazetted. As of the end of 2002, less than 30% of the 114 million hectares the Department of Forestry claims to be State Forest Zone, has been legally gazetted. In the remaining areas, procedures of local government involvement and community participation in boundary demarcation have not been completed and signed off by the Minister of Forestry, strengthening the argument of those who claim that the vast majority of the State Forest Zone is in fact agricultural and not legally within the jurisdiction of the Department of Forestry.\(^{36}\)

**Current Understanding of Forest Cover in Indonesia, Implications for Agriculture**

Relatively recent remote sensing data, is that Indonesia is loosing 1.7 million hectares of natural forest annually to logging (legal and illegal) and conversion to plantation and smallholder agriculture.\(^{37}\)

In terms of actual forest cover, Department of Forestry data reveals that of the 93.5 million hectares of State Forest Zone analyzed in 2002, (West Papua not included), 52.5 had forest cover, 27.6 had no forest cover and 13.3 the quality of the images were insufficient.\(^{38}\) Forest cover was defined broadly as natural forests that can be identified as such on satellite imagery. One of the weaknesses in this data is that there was no attempt to differentiate between agroforests, or groups of trees planted by

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\(^{32}\) This Ministerial Decree based on old Type of Soil nomenclature, which used the old name, for further reading see Bucman. Harry. O, Brandy. Nyle., 1982 . Currently New Comprehensive Soil Classification mostly used with new names (Arbani 1992)

\(^{33}\) SK Mentan 837, 1980.

\(^{34}\) SK Mentan 681, 1990

\(^{35}\) Land classified, as conversion forest has most often become oil palm plantations.

\(^{36}\) Cite martua’s papers and the certification report, Whose Nation Whose Natural Resources?

\(^{37}\) Cite D Holmes paper

\(^{38}\) Pusat Perperutan Hutan, Badan Planologi Kehutanan (2002)
local people on land they claim as their own, and natural forest. It is likely that large areas of land identified in the figures above as “forested”, are in fact agroforests with private rights attached.

Yet looking at the forest/non-forest cover alone, figures show that 24 million hectares production and conversion “forests” of the State Forest Zone have no forest cover. By definition, these areas are most likely to be absent of regulatable public environmental services, as they were not initially classified in the scoring process as protection or watershed forests. It is likely that large parts of these lands are imperata grasslands or under productive agricultural lands due to uncertain tenure status. When communities attempt to gain or improve their access to or control over these lands, they are often blocked by local forestry officials or forest industries that have been awarded tree plantations concessions on what is often village lands.

Increasingly it appears that the greatest "forestry" challenge in Indonesia is an ‘organized retreat’ towards the sustainable management of the nation's remaining natural production, protection and conservation forests for public services or environmental services (biodiversity, watershed protection, carbon sequestration and landscape aesthetics). Management of the other rural lands, including plantations for tree crops or timber, is essentially an agrarian challenge, where equity concerns over the distribution of resource use rights predominate.

Thailand

Thailand is the most advanced among Southeast Asian countries in addressing the forestry/agriculture imbalance. Yet, Thai efforts have also grown out of a history of state/local community conflict over land classified at State Forest Reserves. Like all countries in the region, huge tracts of natural tropical forest in Thailand were a barrier to increased food production and large areas of lowland forests were converted largely to rice paddies. Later, tropical timber exports became viable and vibrant logging industry emerged until, following a series of devastating landslides in the mid-eighties, the government in 1989, imposed a total logging ban.

During the time when much of Thailand was covered in natural forests, these areas tended to be the domain and responsibility of community leaders and managed, ostensibly, for the benefit of local people. They had the authority to negotiate with outsiders interested in harvesting natural teak, a coveted species due to its water resistant properties and still favored for ship decks and outdoor furniture. As the teak market grew, conflicts over concession boundaries and community jurisdiction grew. This led to the promulgation of the first Thai natural resource regulations: (1) the City Land Supervisory Act of 1874 which concerned contracts between local leaders and outside concessions; (2) the Royal Proclamation of 1874 concerning the sale of teakwood; (3) the Royal Proclamation of 1887 concerning the transport of teakwood; and (4) the Royal Proclamation of 1887 that concerns teak log possession.

39 Harry Santosa, personal communication Aug. 7, 2002
40 Direktorat Jeneral Inventarisasi dan Tata Guna Hutan (1996), these figure do not include Java
41 Cite Chris Bennet West Kalimantan and MORE
42 It is important to note that like the Philippines, commercial logging stopped right about the time when viable timber from natural production forests was close to being exhausted
In 1895, H. Slade, a British forester with experience in India, was hired by the Royal Thai Government to carry out a study on the state of Thailand’s northern forest areas. In his report, Slade recommended the establishment of the Royal Forest Department. King Chulalongkorn agreed and appointed Slade as its first Director General. Three years later, following another series legislative acts, all forest ownership and control was taken from local leaders and transferred to the government. 43

As the forest regulatory framework developed over the next half century, centralized control strengthened. By the early 1960s, a legal framework was in place that placed significant control over more than half of Thailand’s land base in the hands of the RFD. Increasing forest cover to 40% of the land base, at the expense of agriculture, and the utilization and protection of the natural forests became RFD priorities.

Following a decade of particularly high conflict between the RFD, local communities and non-governmental organizations, concerning the expansion of timber plantations on community lands, government policy on forest gazettement changed. 44 When Thailand implemented forest zoning procedures in 1992, it became the first country in Southeast Asia to recognized and address the need to rationalize its forest estate. Three zones were created: (1) land already under agriculture or clearly best suited for agriculture, (2) natural forests that must be managed for protection; (3) Forest Reserves.

The impetus behind this fundamental reclassification was in part, government recognition that significant areas (approximately 7 million hectares) of the Forest Estate did not, in fact, have regulatable public environmental services and could be reclassified as private lands that fall within an agrarian regulatory framework. It was also a governance problem. Conflict over these areas became high enough to warrant government response. The government recognized that in their efforts to control land use in more than half the country, the RFD risked losing effective control over their entire area.

Throughout the 1990s, conflict over management priorities and jurisdiction over these zones continued to intensify. The development of a community forestry act became a lightening rod that drew debate from all sectors of Thai society. Today two versions of this have been approved, one from each of Thailand’s legislative bodies. A final compromise version has yet to be agreed upon. Yet while this debate continues, several significant administrative reforms have been unfolding. In 2002, some functions of the Royal Forestry Department were broken down and divided up and released to the Department of Agriculture.

CONCLUSIONS

While this paper highlights the constraints local farmers often face when their lands are irrationally classified as permanent forest estate, it is important to also recognize that farmers also face constraints when facing agrarian regulatory frameworks. Yet, within the agrarian framework, small holders are less regulated, giving them wider

43 As cited in the Thailand Natural Resources Profile p.83
44 There was a particularly aggressive NGO campaign, led by the (Thai) Project for Ecological Recovery, against the planting of eucalyptus camaldulensis plantations due to their heavy water demand and high level of nutrient uptake
options and more versatility in decision making over land use, particularly concerning what they plant and how they market their products. Land ownership is a central component of any agrarian framework facilitating access to credit.

But factors also constraining farmer choices when operating within an agrarian regulatory framework include global development and trade policies, national protectionist policies, as well as localized economic and regulatory instruments. Unlike in the forestry sector, these policies and instruments are not directly technical, neither are they directly repressive nor directly aimed at restricting access of certain categories of actors. However, they do contribute to setting the framework of agricultural development and the set perimeters for farmer decision-making. Indirectly, they give the preference to specific models of production, to specific social relations of production, and therefore they contribute to the elimination of marginal models and marginal actors.

The vision of agrarian development defined by economic criteria (efficiency, productivity, intensification) generally dominates in tropical countries. This can translate, as in Indonesia, into a strong government support (through land attribution policies and financial instruments) for plantation agriculture, which often usurps smallholders land.

Yet, acknowledging the hazards farmer also face within the agrarian framework and the policy reforms needed to level the playing field in the competition over land between larger and small holders, the first step in this process is for governments, particularly agencies responsible for developing and implementing forestry regulation to recognize that large areas with their domain need not be regulated as forest lands and that their efforts and budgets are best directed towards those lands that can rationally be classified as permanent forest estate. This paper has argued that such deregulation will free up the energy of millions to farming families who are prepared to increase their investments into improving land productivity if they have secure land tenure and relevant extension support and better market access. This will also be an important first step in addressing the widespread conflict over land in all three countries studied and logically improve the management of the remaining natural forests by allowing the forestry agencies to retreat to a position where they can effectively focus their efforts on sustainable management of areas of forests that genuinely provide regulatable environment services.