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Formalization as Development in Land and Natural Resource Policy

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Policy Review

Formalization as Development in Land and Natural Resource Policy

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Responding to multiple problems affecting governance of natural resource access and trade, governments implement formalization processes, often driven by the interests of development agencies. In so doing, they interact with the contemporary political, social, and environmental contexts in which resources are extracted, produced, and traded. They also contend with histories of ownership, access rights, market configurations, and practices attached to resources and the lands in which they are located. As development policy, formalization frequently materializes as top-down restructuring based on current social and environmental norms. However, its adoption is often unsuccessful and entails risks including leakage, barriers to small or poor actors, elite capture, and negative effects on women or marginalized groups. The insights herein are informative to current processes of formalization associated with the European Union (EU) timber trade regime and other resource governance efforts. At the minimum, incorporation of adaptive approaches and user-accountable monitoring in such processes are recommended.

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This special issue on formalization of access to and trade in natural resources arose in response to a current international resource governance process. Over the past decade the European Union has engaged in a battle against illegal logging. The resulting Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan is an effort to implement new global trade rules and affect national-level forest governance to overcome the problems of illegal logging and timber trade, which “cause environmental damage, hinder sustainable development, cost governments billions of dollars in lost revenue, promote corruption and undermine governance and the rule of law” (Brack 2012, 211). As an outcome of FLEGT, several European Union (EU) trade partners have signed agreements that promise to regulate or legalize their highly informal domestic timber sectors, which de facto entails a major formalization process. To complement a broader research project specific to the timber industry, we convened a group of scholars with broad perspectives on former and current formalization processes in other sectors, including fisheries, mining, nontimber forest products, and land. This issue is the outcome of their individual studies and their interactions in group meetings in Brussels, Belgium, in May 2012 and during the conference of the International Association for the Study of the Commons in June 2013.¹

Today’s governments and development institutions face the monumental task of addressing the unsustainable exploitation of land and resources—including timber, minerals, fisheries, and many others—throughout, but not limited to, the “developing” and “emerging” world, in the name of the public good (McNeely 1988; Sterner 2003, 27). That world is increasingly connected: Individual and local activity is linked to global markets and governance institutions that in turn affect human and environmental outcomes on the ground. At the same time, those activities and outcomes occur in the context of specific histories of people and places, which, almost without exception in developing countries, have been subject to colonial, authoritarian, and sometimes socialist experiments (Peluso, Kelly, and Woods 2012), each influencing trajectories of policy and practice.

The mandate of global institutions to define governance norms to which individual states are expected to adhere grew throughout the last century. However, in practical terms there are starkly divergent perspectives on how and why norms are adopted and realized. Mainstream liberal thought posits that effective governance in a globalizing world is more likely to occur through interstate cooperation and transnational networks sharing normative beliefs, rather than through the work of individuals or national groups (Keohane 2001). In counterpoint, the widely discussed environmentalist value–belief–norm (VBN) theory of social movements implies that change occurs as individuals react to and support or reject collective action toward normative goals depending on their own beliefs and capacities (Stern et al. 1999), explaining behaviors relevant to natural resource use and management, including “environmental citizenship, private-sphere behavior, and policy support (or willingness to sacrifice)” (Stern 2000, 413). Walker and Salt (2006, 87) characterize a “conservation phase” of capital accumulation, in which are prevalent “increased command and control (less and less flexibility),” “preoccupation with process (more and more rules, more time and effort devoted to sticking to procedures,” and the

imposition of “one-size-fits-all” policies. As resource scarcity and competition among sources of global capital increase, we perceive a conservation response on the part of global development agencies focused on changing rules and inventing new ones, which may or may not fit. In this, questions of structure and agency are likely unavoidable: Governments restructure systems of ownership, access, and exchange for reasons that include producing public goods or capital accumulation; individuals (and groups) legitimate the new rules or not depending on their own consciousness and power (Giddens 1984, 5–17).

These several perspectives on social change (among countless others we ignore for the sake of argument) inform and shape solutions to problems of socially and environmentally unsustainable systems of land and resource use. The path between the two imaginary extremes—simplified here as the global/top-down/institution-based and the local/bottom-up/individual-based—is maze-like, thorny, and occluded, however. There lies a disconnect between the top-down promotion of norms by institutions and the adoption of practices that align with those norms by the people to whom they are recommended or imposed. While this disconnect is well recognized, it continues to hinder development institutions. For example, in the case of the implementation of the Millennium Development Goals, the lack of direct grass-roots participation and the representation of the poor by nongovernmental organization (NGO) and researcher intermediaries resulted in the imposition of a number of one-size-fits-all policies (Camfield, Crabtree, and Roelen 2013). The gulf between institutions and individuals is difficult to bridge, as each aspect of a normative policy interacts with the place- and people-specific histories of governance of land and resources, and those same places and peoples seek their space within the current context of global interest and priorities.

Formalization stands at the intersection of the two perspectives. On the one hand, it is often deployed by global institutions to promulgate social and environmental norms through the political and legal, state and nonstate governance systems that operate in national and, increasingly, transnational space. On the other hand, it can arise as a response to collective action at the grass-roots level, when individuals acting together understand a need to develop or operationalize governance mechanisms in their own interests, for example, to protect a common pool or private resource or to prevent conflict. In this sense, formalization operates on both sides of Polanyi’s (2001) “double movement,” capable of both driving liberal economic agendas forward and enabling practical resistance, including resistance to the harsh realities governance agendas may engender. Which outcome prevails is in part dependent on the timing of formalization in the context of trajectories of development: Does it occur when it will benefit current land and resource owners, or only at a moment of expropriation, or to actually facilitate land and resource grabs? As noted by Benjaminsen et al. (2009), timing of formalization may be and probably very often is determinative of outcomes either benefiting or dispossessing local people.²

Promulgated for many different reasons ranging from poverty alleviation to nature conservation to accumulation of wealth and power for centuries, formalization in different formats continues apace today. With the 2003 FLEGT Action Plan and subsequent Timber Regulation banning illegal wood from the EU market, the subject of formalization of resource access and trade acquired new international importance (see, e.g., Cashore and Stone 2012). Through “voluntary partnership agreements” or VPAs with timber-producing countries the EU requires verification of the legality of timber produced in partner countries. In many cases these agreements involved a commitment by producing countries to “legalize” or “formalize”

domestic timber production, trade, and markets, much of which had historically been occurring outside the nation's legal framework (Wit et al. 2010). Indeed, in some partner countries, the majority of timber produced is informally harvested and traded by people who depend on such activities for their livelihood, often with the knowledge and cooperation of interested local and national officials overseeing the sector (Hansen et al. 2012; Cerutti et al. 2013; Lescuyer, Cerutti, and Robiglio 2013; Obidzinski and Kusters 2015).

The benefits of designing and enforcing new rules of ownership, access, and trade cannot be taken uncritically, however. A study published around the beginning of the VPA negotiation process found that "with regard to sustainable forest management . . . the imposition of homogeneous legal frameworks by the state does not take into account the diversity of local realities and often neglects the existing working rules for forest resources use adopted by smallholders and communities" (Pacheco et al. 2008, 3). Agricultural economist Bromley (2008, 26) challenges the notion that a foreign concept of ownership (such as ownership documented through formal land titles) can be transplanted effectively into a large and complex social system in which it does not belong. He asks, "What arrogance is required to presume that titles will fix, rather than undermine, long-standing fundamental social and economic relations?" With the promotion of global regimes that require rapid legal and regulatory reform, of which FLEGT is one, it is worth closely examining the processes of formalization in different sectors and different parts of the world in order to glean praxis-oriented insights and call attention to some potential pitfalls.

The contributors to this volume deliver a nuanced and critical perspective through cases from several natural resource sectors, including forestry (both timber and nontimber forest production), mining, and fisheries, on the driving forces and outcomes of recent and historical formalization efforts. Further, because determination of land rights is fundamental to all other resource regimes and has also been uniquely central to past arguments for formalization as a development policy, we include a review of the histories of land formalization in three countries, following very different trajectories of colonial, socialist, and postindependence polity.

Anchored geographically as well as in specific productive sectors, the cases in this collection elucidate remarkably divergent rationales that have driven formalization interventions or movements; in a few cases the benefits (perceived or actual) to people and/or to their environment are clear; in all cases, processes of formalization entail risks, often unmitigated, and sometimes fatal to the objectives of the effort. No easy solutions are drawn from these studies to illuminate a pathway of recommended actions for institutions interested in intervening for one reason or another in the social systems governing natural resources and land. Rather, this collection of case studies offers grounded and theoretical insights as to how very different spatial, historical, ecological, and political economic contexts tend to inhibit or facilitate formalization in natural-resource sectors. It also provides greater understanding of who benefits from these processes and how these benefits accrue, especially in the tropical developing world. Together, the authors of these cases bring new insights to and lessons for the formalization processes that will be launched in response to the FLEGT-VPA, which are vital to subsequent decisions of enforcement and development of agreements with new partners. Beyond this, global and national development agencies seeking to improve resource access, use, and trade through formalization will find herein essential knowledge of what may work, under what conditions, as well as some of the risks inherent with interventions into complex socioecological systems.

Defining Formalization

“Formalization” can be defined as the replacement of informal ownership, access, and economic activity through the “recognition and inscription by the State of rights and conditions of access” and within specific boundaries (Hall et al. 2011, 28 in Kelly and Peluso 2015) or, alternatively, as “processes of identifying interests, adjudicating them and registering them” (Meinzen-Dick and Mwangi 2007, 38) or codification of any informal or customary rule or practice (Pacheco et al. 2008). In the cases presented in this volume, formalization is the codification of rights to own, access, or trade land and resources in a written legal or regulatory canon that is accepted by the State. However, in the course of that process, not all interests are understood or adjudicated, nor are the rights of all interested parties considered and recognized.

The term “informal sector” appeared in the 1970s to characterize unregistered labor and was popularized by the International Labor Organization to refer to small-scale low-technology, low-productivity, and low-income activities important to local livelihoods (Rakowski 1994; Yusuff 2011). Informal resource tenure, access, and trade have been treated differently and with different outcomes. When interpreted as a form of avoidance of taxes or regulation, rather than a legitimate subsistence strategy of the economically oppressed, informal economic activity is criminalized, prosecuted, punished, and eradicated (Sepulveda and Syrett 2007; Spiegel 2015). Conversely, informal economies are perceived to arise and persist in an environment of excessively burdensome taxes and regulations imposed by governments that either lack the capacity to enforce compliance (Loayza 1997 in Sepulveda and Syrett 2007) or willingly maintain a layer of informality to serve their vested interests (Ascher 1999, 120; Cerutti et al. 2013).

In development policy, attitudes toward informality differ greatly, ranging from the perception that informal activities should be regulated or eliminated, to the view that vulnerable informal workers should receive social assistance, or be protected from interference with their entrepreneurial activities (Chen 2007). Formalizing informal land tenure, meanwhile, has been addressed especially as a means to bring marginalized economic actors into the national economy. In this model, these actors are supposed to benefit from legitimate ownership (which, for example, is a basis for obtaining credit) while contributing to the economic development of the nation-state (as per de Soto 2000; 2002).

In the context of land tenure, natural resource management, and sustainable development, the informal sector has often been perceived as a challenge to those who believe the state is the agent that will accomplish sustainable development through policymaking and regulation. To states, the informal sector is a hindrance because it is “unknown,” “illegible,” “invisible,” and “not regulated” (Scott 1998; Briassoulis 1999), at least to agencies and actors with the intention to tax and regulate it. These agencies and actors generally classify this sector as “illegal.” In this sense, “illegal” access and trade in natural resources is often tied to corruption, environmental degradation, the reduction of potential government revenue for general economic development, and so on. Illegal forest activities have been associated with biodiversity loss, soil degradation, and reduction of water provision and quality as well as carbon storage capacity. Illegal logging is said to depress international wood prices, to contribute to overextraction, and to result in billions of dollars lost annually to national revenue services (Contreras-Hermosilla 2011). Also, the harvest and illicit trade of nontimber forest products (NTFPs) across national borders highlights the weak governance, the porosity of state borders, and the inability of states’ laws to affect practice on

the ground (Wynberg et al. 2015). In the mining sector, “artisanal” or “illegal mining” of precious metals and other “lootable” resources like oil and gems is often blamed for funding or causing armed conflicts and human rights and labor violations (Le Billion 2001; Collier and Hoeffler 2012; International Peace Information Service [IPIS] 2012).

In the context of contemporary national policy as well as international regimes³ (of which the EU FLEGT Action Plan is one, with the VPA as a key instrument), formalization is commonly prescribed as a solution to problems associated with informal (or illegal or extralegal) economic activities undertaken by actors and communities. These activities include practices deemed environmentally unsustainable or socially undesirable. The latter include untaxed or undertaxed trade in land and resources, aggravation of poverty due to corruption and inequitable access to resources, conflicts arising from encroachment on land and resources by outsiders or newcomers, and financing of armed conflict.

Formalized rights to trade, access, or own natural resources are often touted as a means by which poverty, environmental degradation, human rights abuses, and conflict can be reduced, while economic development can be enhanced. For example, Soule, Tegene, and Wiebe (2000) make the claim that secure property rights lead landowners to adopt more sustainable land management practices like contour farming, strip cropping, and grassed waterways. In the artisanal mining sector, formalization through delimitation of rights and regulation is supposed to reduce the environmental degradation associated with the mining of these minerals and improve compliance with human rights and working standards (IPIS 2012). These are *prima facie* persuasive arguments that fit easily into international discourses of environmental, economic, political, and human rights. They align with conventional responses to Hardin’s (1968) “tragedy of the commons” through formalization to private or public resource regimes, leaving no pathway for effective collective and/or customary resource governance. They do not sufficiently take into account the diverse literature on governance of the commons, and particularly forests, in more recent years, contextualizing the success and failure of formalization processes. The simple restructuring of rights to private or public regulatory systems, as the case studies in this issue show, often lead to destruction of resources and inequity, whereas adaptive governance integrating customary regulation of common pool resources and local community self-organization holds more promise (see Dietz, Ostrom, and Stern 2003; Ostrom 2005, 243–44). As current formalization processes unfold, it is essential to learn from empirical examples of top-down and bottom-up approaches, privatization, and state control, as well as adaptive governance incorporating customary systems.

The case studies in this collection do just that, parsing the complex and varied results of formalization processes in specific sectors, environments, and political economic contexts, and detailing site-specific histories and current contexts that inescapably affect the outcomes.

Historical Factors Affecting Formalization Outcomes

Formalization of land and natural resources ownership, access and trade is influenced by national histories of use, title, and control. As Peluso et al. (2012) point out, internal national territories and land control practices are not static and are not the same in different nations. These site-specific histories influence contemporary laws, everyday practices, and institutional/individual memories (Sjaastad and Cousins 2009; Alden Wily 2012; Peluso et al. 2012; Kelly and Peluso 2015). Colonial

interventions in many of the countries discussed here were highly varied and produced many different outcomes. Differing ambitions for colonial interventions led to varying levels of investments in transport infrastructure, education programs, and development of markets whose legacies still exist today. Differing colonial ideas about territory, land use, and “native rights” have persisted or been reacted to by independent governments and social movements (e.g., Kelly and Peluso 2015). In many cases colonial notions of “the household,” vacant/unproductive land, or cultural difference were hardened into legal categories that marginalized certain parts of society and land uses while privileging others (Banerjee and Iyer 2002; Peluso et al. 2012). In some cases, colonial methods of formalization and dispute mediation continue to be tools used by national state administrators to legitimate their power over land, resources and people. Indeed, “land registration with state underwriting was meant to eliminate overlapping claims and facilitate the state’s governance of land” (Peluso et al. 2012). In cases where independent governments have followed in the footsteps of colonial regimes, the groups that colonizers favored (e.g., settled agriculturalists as opposed to migrants and pastoralists in Africa) or considered “rightful owners”—for example, native Fijians versus Indian migrants in Fiji (Chappelle 1978) or Dayak versus Chinese farmers in West Kalimantan (Peluso 2003)—are often the same groups that gained dominant political power at independence. In such cases, the structures of access created by the colonizers have often persisted more-or-less unaltered, though ownership may (or may not) have changed hands; such is the case of timber concessions in Central Africa (Sharpe 1998; Karsenty et al. 2008) and Southeast Asia (Colchester and MacKay 2006; Vandergeest and Peluso 2006). Long after independence, Latin American countries adopted similar models (Colchester and MacKay 2006) and reinforced them following pressure from transnational institutions and foreign states, as in the case of Peru (Putzel 2009).

In other cases, independent national leaders have gained power over land and resources by pitting their administrations in direct opposition to colonial legacies, pursuing avenues of socialism and/or constructing and [re]instating indigenous ownership rights and governance systems. In states that experienced socialist governance or influence (e.g., Tanzania, Vietnam, Cambodia, Ethiopia, and Indonesia) the formal reorganization of land rights and use has influenced current regimes of ownership and use, as well as these nation’s citizens’ conceptualization of their rights and their trust for government-led land directives. Ideas of equity, justice, and rightful land claims are influenced by socialist thought even if the country is no longer (or never became) socialist (Kelly and Peluso 2015). Peluso et al. (2012) use the example of Indonesia, which allowed a socialist group to join the ranks of many other political parties in the nation, to show how such influences could help produce the limits on land holdings and land reform enshrined in its Basic Agrarian Law of 1960. In some cases, like Tanzania, where forced “villagization” practices were a part of socialist land formalization, people have become suspicious of land reforms. As a result, more recent land reforms such as the 1999 Land Act and Village Land Act were more difficult to institute, despite the fact that Tanzania’s socialist period has ended. As Daley (2005, 565) notes, “Tensions arising from the disjunctures between local processes of land commoditization and longstanding prior national land tenure policy are therefore likely to cause continuing problems and insecurities.” Ethiopia’s experience with repeated land redistribution programs carried out by the socialist Derg Regime has had similar effects—despite land formalization

programs set in place, farmers are still distrustful of national land policies and directives and as a result expect to lose land despite having formalized use rights (Ali, Dercon, and Ghautam 2007, 8). Difficulties in implementing land reforms are, of course, not always caused by a nation's socialist past. The implementation of land reforms in places without socialist pasts, like Kenya, South Africa, and Zimbabwe, have been fraught processes due to other historical precedents and contemporary political-economic issues.

In some cases, reinterpretation of the identities and historical rights of indigenous people has been used in efforts to wipe out colonial legacies and reform ownership. Wynberg et al. (2015), for example, mention Zimbabwe's 2007 Indigenisation and Economic Empowerment Act, which purported to induct "indigenous" Zimbabweans in the management of natural resources and economic development, spurring a period of disordered settlement in ecologically sensitive areas and overexploitation of resources. In Cambodia, a new land law influenced by international institutions such as the United Nations Development Program and Asian Development Bank passed in 2001. The law, like a forestry law passed before it, included special provisions for indigenous communities. These resulted not in fair distributions of land, but in a proliferation of groups identifying as indigenous (many of which formerly had to assume Khmer identity to avoid persecution) (Baird 2011, 155–76).

Even in states that were not formally colonized (e.g., Siam/Thailand) or occupied for an extremely brief period (e.g., Ethiopia), European-style land formalization took place well before World War II. These states, surrounded by those that were colonized by European powers, recognized the utility of formalized territories and rights in land. Thus, just as in colonized nations, the formalization of taxation and land and natural resource rights took place. These histories of formalization have also engendered long-standing and legalized categories of land, people, and livelihoods. Thus, in countries that had little or no colonial history, those that continued colonial traditions after independence, and those that attempted to completely erase colonial legacies, the legacies of long-standing, legalized, and often dualistic categories of land, people, and livelihoods continue to influence how formalization takes place, who benefits from it, and how these processes are perceived by the nation's citizens (Mamdani 1996). For example, in Ethiopia, a country that sought to modernize itself by establishing a modern civil code (Mamdani 1996, 132), those with certain livelihood practices (e.g., sedentary agriculturalists) are privileged in land formalization efforts over those with different livelihoods (e.g., pastoralists), building on a tradition that has persisted since the 18th century (Collins 2006; Makki and Geisler 2011).

Modalities and Directions of Formalization Processes

The examples of recent or current formalization actions and processes presented in this issue represent many combinations of international, national, and local responses to problems of ownership, access, and exploitation of land and resources. The cases strongly suggest that measures implemented in a top-down direction, as development policy, to propagate the norms and interests of powerful foreign states and global institutions or entities are bound to encounter unforeseen obstacles as they approach and penetrate local systems of practice with their own norms and historical precedents. In part, this is because the governance instruments employed simply do not fit the local context (Bromley 2008). More deleterious outcomes are

common when informal or customary activities are pushed into illegality. As a result, ordinary people seeking their livelihoods through opportunities they formerly relied on may be subject to prosecution, while more powerful, criminally oriented, or even violent groups inherit the sector (e.g., Thompson 1975; Spiegel 2015). On the other hand, formalization may help local artisanal users, as it may secure their access and prevent overexploitation. In such cases, inadequate regulation can cause those users to lose the market while larger players more closely linked to sources of investment and to global markets gain traction.

Formalization is undertaken by states in the name of improving governance and producing some environmental or social benefit, and often in the name of global institutions and regimes. However, as Kelly and Peluso (2015) show, the formalization of land and natural resources benefits states economically. The formalization of state territories and resources and their subsequent commoditization allow state agents and institutions to accumulate capital through both legal and illegal means. The formalization of land and resources also makes them legible to other nation-states and capitalist actors and institutions, making way for expanding globalized markets. The global “land grab” (for a synthesis see Borras and Franco 2012) is one example of how formalized property rights and transactions enable certain corporations, people, and governments to gain title to massive amounts of land and resources even in nations where they do not happen to be citizens, albeit not always entirely following the legal prescriptions.

New formalizations often contradict or undo prior regulatory systems and policies, even ones that were recently implemented and promoted. The cases presented on logging in Indonesia and mining in Zimbabwe illustrate this well, as the most recent round of formal rules recentralizes sectoral oversight that had been decentralized in the previous one or two decades. In Indonesia, a new timber legality verification system (known by its Indonesian acronym, SVLK), was launched by the government in 2013 in preparation to sign a VPA with the European Union (Obidzinski and Kusters 2015). This new system was a reaction to the destructive ecological effects of the international trade in illegal timber, characterized by destructive effects on forests, as well as to the illicit diversion of revenues owed to the state. The Zimbabwean government chose to criminalize artisanal and small-scale mining (ASM) and in particular riverbed panning in response to the aggravated economic crisis and hyperinflation of the mid 2000s. This criminalization aimed to capture revenues and direct them to the government (and government officials), and thus address disorder in the sector (Spiegel 2015).

Though different in many respects, the cases just described represent top-down decision making that interferes with decentralization policies implemented to stimulate more efficient local governance of land and natural resources. In the Zimbabwe case, the attack on riverbed panning reversed a prior formalization of ASM that was supported by international donors since the 1990s and that was recognized as a positive pro-poor economic initiative, which empowered local government and connected small-scale miners to sources of technical support. While the Indonesia case also recentralizes some degree of authority, there is a history of elite capture and noncompliance to former regulatory systems that has a high probability of thwarting the current measures, leaving the rural poor marginalized as they have been through past sectoral structurations.

In contrast, the cases on NTFPs in Southern Africa (Wynberg et al. 2015), land titling in Western Amazonia (Cronkleton 2015), and inland fisheries in the Brazilian

Amazon (McGrath et al. 2015) illustrate very different patterns in the institutional context of formalization. These cases represent more “organic” responses of regulatory systems to norms (in the case of the NTFPs) and to local resource interests (in the Amazonian cases). In outhern Africa, the Convention on Biological Diversity—with its collateral provisions related to respect of local and indigenous knowledge, access and benefit sharing, and informed consent—along with several other international conventions on biodiversity, trade, and indigenous rights, resonated with local and national efforts to manage extractive practices more sustainably. Dozens, if not hundreds, of regional, national, and local laws and policies have adapted to the norms of the biodiversity and, to some extent, indigenous rights regimes, and there are many cases in which formalizations attempt to incorporate or conform to some interpretation of customary rules.

These cases show that while a gradual adaption of norms into complex legal systems at multiple scales may be more effective than organized, top-down structuration required or funded by global institutions, these more “organic” regulatory systems still leave much to be desired. In fact, Wynberg et al. (2015) suggest that some of the same problems of elite capture and corruption continue to reduce the benefits of the NTFP business to local community resource managers and extractors. In particular, in the case of the transborder trade in baobab products from Zimbabwe, women who formerly were able to operate within favorable informal networks have suffered abuse in dealings with a new set of male officials overseeing their permissions. In addition, in part due to very different manifestations of formal rules and customary practices among the countries in the region, overextraction has continued to be a problem in places with less effective governance. Although less centralized and adapted with more internal than external direction in response to relevant global norms, the legal changes described in the Southern Africa NTFP case are nonetheless largely top-down at the scale in which they are implemented, leaving out the marginalized and failing to reach the peripheries of power.

Among the cases presented in this issue, the Amazonia cases exhibit the most “bottom-up” examples of formalization. Even these models are imperfect, however. In the Brazil fisheries case, local community artisanal fisher groups allied with NGOs and scientists have sought government support in formalizing rules of access and catch requirements in a series of activities grounded in the interests of current resource users. The degree to which government has effectively responded to these efforts varies a great deal among states and also differs between management of rivers, where access is open, and management of lakes, where tenure of surrounding lands to some degree limits access. With certification of fish as an environmental and development goal in the context of regional and global markets, the inability of national and state government to effectively regulate wild fisheries is likely to lead to increased market-oriented aquaculture and overextraction of wild fish from commonly accessible water sources. Except in isolated cases where artisanal fisher organizations are able to achieve controlled access and certifiable standards of management (e.g., in potentially in some cases in Amazonas state), a likely scenario of certification without more effective governance of fishing through co-management of local groups and state government is the eventual marginalization of noncommercial fishers.

In Peru and Ecuador, national land titling schemes have been operationalized by indigenous and mestizo communities to claim territory. Collective action has been effective in gaining formal title, but, except in the case of indigenous reserves, there

has been a tendency toward granting individual private titles. This is due in part to market capitalist ideologies following de Soto (2000), even in communities where collective ownership had been more common. Land titling in Western Amazonia has been a messy process, with many contested and competitive claims and associated conflicts. In the end, titling does not necessarily lead to long-term tenure security, both because of the potential for alienation through sales and because of disregard for procedures necessary to maintain titles after they are obtained. Even after formal titling, informal collective institutions and social cohesion are often more important than formal documentation in maintaining possession and regulating use.

Risks Associated With Formalization Processes

Whether a formalization process reproduces or repudiates colonial land/resource policy, and whether it is conducted in a top-down direction through institution-driven restructuring or responds to demand from resource or landowners, we observed through case comparisons a number of risks to marginalized groups and the natural environment and resource base. These risks range from inefficacy (failure to resolve the problem driving the formalization, or economic losses from the sector) to more extreme forms of social and environmental damage.

Policy Failure and Economic Loss

Newly formalized regimes of resource access and trade often fail due to lack of capacity to effectively police activities of informal actors, especially in remote areas. For example, after numerous attempts to reinforce and rewrite forestry laws to prevent informal logging, the Peruvian natural resource authority has been largely unable to enforce the formal regime (Sears and Pinedo-Vasquez 2004; Smith et al. 2006; Putzel et al. 2009; Environmental Investigation Agency [EIA] 2013), in part because it doesn't work in the favor of local people who manage the resource in other ways. Cronkleton (2015) illustrates how, even after major policy initiatives promoting land titling in the Peruvian and Ecuadorean Amazon, rural families continue to rely on social networks, kinship, and physical occupation of land to ensure secure access rights to resources. Wynberg et al. (2012) describe the hopeless case of a small forest commission office tasked with enforcing the sustainable harvest of baobab in an area of more than 3000 square kilometers. Lack of enforcement leads to a culture of evasion, such as in Zimbabwe, where, according to Spiegel (2012), small-scale gold mining continued to be conducted at night, and in Indonesia, where gold mining in Kalimantan shifted to areas that were less accessible to police, resulting in new damage to forest areas.

Formalization of land and resource regimes can also create or worsen poverty in several ways. When extraction rates drop due to new regulations, which sometimes include temporary or permanent bans on extraction or exports, an entire sector may experience economic losses, engendering negative effects on local livelihoods (IPIS 2012) and even causing displacement of people to new lands and resource zones (Putzel and Kabuyaya 2011). The formalization of land titles can result in the buying and selling of smallholder lands that were formerly not as easy to trade (Peluso et al. 2012), leaving people without land for the long term. Sometimes informal market outlets are destroyed, such as in Zimbabwe in 2005 when illegal settlements were removed from roadsides and in urban areas.

Exclusion Effects

Expropriation and exclusion of economically vulnerable or marginalized people, including minority ethnic groups, is a frequent outcome of policies that formalize ownership and access. Such was the case, for example, in Cambodia when a World Bank-supported titling scheme privatized land between villages, to the benefit of local officials and businessmen and to the detriment of former users (Biddulph 2011, 227 [citing Van Acker 1999; Biddulph 2000]; Peluso et al. 2012). In Indonesia, the expansion of concession forestry (sometimes with strong interests among members of the military) resulted in the exclusion of communities from forests in which they had longstanding customary rights (Obidzinski and Kusters 2015). When different use rights overlap in the same space, the formalization of one use (such as logging) can eliminate other uses (such as agriculture or animal husbandry)—impooverishing alternate users (Benjaminsen 2002).

Apparently, unless equity is the primary reason for formalization (and even then as in the *Pelargonium* case described in this issue), those with less power are likely to lose. As mentioned earlier, in southern Africa, many women withdrew from trading baobab products across borders to avoid abuse by male officials (Wynberg et al. 2015). More generally, new standards, including those that require costly certifications and permissions, often represent barriers to entry to smaller and poorer user groups, as is the case in the botanical markets described by Wynberg et al. (2012) and as will likely be the case if efforts to implement certification of fish in Brazil are successful (McGrath this issue). These effects are already well known in the timber industry (see, e.g., Scherr, White, and Kaimowitz 2004, 130–55; Schepers 2010; Putzel et al. 2012).

Criminalization and Conflict

Beyond exclusion, the criminalization of informal-sector actors is a potentially severe risk in formalization processes. Arrests and imprisonment disrupt the lives of informal miners, loggers, and others who fall on the wrong side of a new regulatory frame. After the crackdown on (formerly acceptable) small-scale mining in Zimbabwe, tens of thousands of people were arrested and some were imprisoned for up to 5 years. Such events, as well as new determinations of ownership, access, and use, often lead to conflict because these policies contradict existing rights in the consciousness of users. If prior rights are swept aside for the sake of simplification or pragmatism, conflict arises from the memory of those rights (Peluso et al. 2012).

Elite Capture and New Forms of Corruption

All of the case studies in this issue elucidate examples of elite capture and corruption. Elite capture occurs even in participatory processes of policy creation, in which local-level leaders, often representing their communities, take advantage of their access to information and other resources to obtain benefits for themselves (Platteau 2004). In Thailand, for example, businesspeople with prior knowledge of land titling rushed to obtain land prior to the arrival of official surveyors; in a Cameroon titling process only better-off people could afford to pay and wait for land titles (Peluso et al. 2012). Beyond elite capture and corruption, there are other forms of fraud.

In a case in Pará, Brazil, where formalization of fisheries was associated with social security insurance, those in charge of administering the insurance falsely registered thousands of nonfishers in exchange for half of their insurance payments (McGrath 2012).

New rules create new opportunities for corruption. Cerutti et al. (2013, 10) found that in the Cameroon timber industry corruption is a reason for policy failure because “officials on the ground [have] no *raison d’être* other than self-maintenance through the collection of bribes, regardless of how many new regulations are approved by a discredited upper hierarchy” and that “any legal text adopted . . . to regulate [illegal logging] might be enforced to extort money.”

Environmentally Destructive Outcomes

Even when formalization policies are implemented to fulfill conservation goals, they can sometimes engender negative environmental effects. Sometimes these effects occur after a new policy is implemented but prior to enforcement, when resource users rush to stake claims on land and resources. In both the Peruvian and Ecuadorean Amazonia, rural people reported that occupying land and clearing it for use were key to establishing their claim to land, and forest clearing and actual cultivation were used by governments to assess the validity of their claims (Cronkleton 2015; Padoch et al. 2014). Environmental damage can also occur when customary systems of management are disrupted by new rules and traditional authorities are sidelined, as was the case in Zimbabwe’s baobab sector. On the flip side, extractors there who were brought into a system of permitting and taxation felt entitled to take as much as possible of the resource in return (Wynberg et al. 2012).

Conclusion—Formalization and International Development

Formalization of ownership, access, and trade in land and natural resources is a key function of the state, which exists in large part to manage public goods and adjudicate among competing interests. Ecologically sustainable management of lands, waters, and the natural resources therein requires systems that govern the nature and geographic extent of permitted activities, and some degree of equity among users requires social mechanisms that mediate ownership and sharing. Equity (or the perception thereof) contributes to conflict prevention (Fisher 2006), and entails a reduction of relative poverty. Ecological sustainability and equity are among the stated goals of many development institutions. With limited resources to affect those outcomes themselves, those institutions frequently invoke the power of the state to use legal and regulatory systems, and later enforcement mechanisms, to alter the ways in which public goods are managed and competing interests are adjudicated.

This issue highlights a number of problems that arise in formalization processes implemented as development policy (and even when there is demand from the grass-roots level). Many of these problems derive from the existence of multiple systems of ownership of and access to land and resources: These can overlap at different geographic scales and among different uses and resource activities; perceptions thereof can vary widely among groups, especially between outsiders and locals. Those perceptions and resulting behaviors are in turn influenced by histories of migrations, conquests, colonizations, independence movements, socialist experiments, indigenization, privatization, decentralization, and recentralization. For these

reasons, the imposition by the state of new structures of ownership and control designed according to the interests of transnational and sometimes national institutions results in mismatches between the perceptions of those with claims over land and resources and the new barriers and opportunities they encounter. Moreover, beyond perceptions, after formalization individuals and groups often experience changes of fortune when they obey new rules (and lose or gain access to benefits) or when they disobey and encounter prosecution or engage in conflict. Finally, formalization is often implemented as a form of capital accumulation that disproportionately benefits more powerful actors, who may abuse privileged positions to their advantage. These highly probable outcomes point to a need for, at the minimum, adaptive co-management between state and local (including customary) institutions (Dietz et al. 2003; Ostrom 2005), and avoidance of “blueprint thinking” (Korten 1980, in Ostrom 1999).

The cases in this issue represent different configurations of external versus internal drivers of formalization, ranging from highly direct and targeted interventions by global institutions (e.g., timber in Indonesia) to the adaptation of multiple national institutions to emerging global norms (NTFPs in southern Africa) to the establishment of new rules and incentives through adaptive co-management between local communities and the state with support from NGOs and researchers (fisheries in Brazil). In all cases, elite capture, exclusion effects, and/or the acquisition of rights by groups with more economic or political power, who are often outsiders, occurred. Insufficient capacity of the state to enforce rules is a pervasive problem. On the other hand, excessive punishment and criminalization of marginalized actors is also a danger. In some cases, environmentally destructive outcomes such as uncontrolled access and cross-border leakage effects are evident.

What is the applicability of these insights? In 2013, a law banning the import of illegal timber into the EU came into effect. Importers must now be able to demonstrate due diligence when importing timber; that is, they must be able to prove that they made reasonable efforts to verify the legal origin of the product. Timber bearing a voluntary partnership agreement (VPA) license is deemed to satisfy due diligence and relieve importers of responsibility (see British Standards Institution [BSI] 2012). Producer countries must have a signed VPA with the EU in order to issue such a license, which comes with its own set of formal procedures and conditions. In a number of countries—including Ghana, Republic of Congo, Cameroon, Liberia, Indonesia, and eventually Central African Republic—these conditions include a commitment to formalize all timber produced within the country, including that sold domestically (Bollen and Ozinga 2013). However, the majority of such timber is logged informally and traded locally following any number of local patterns of ownership and control.

Based on comparison to our cases, the VPA process follows the pattern of an externally driven intervention, initiated by a transnational institution, requiring top-down formalization of national timber industries in partner countries, though to some degree mediated by participatory events. This process has so far involved many meetings with various groups of stakeholders (with the apparent exception of informal loggers) and promises to review national laws relevant to forestry. However, customary or informal rules of access and trade have been largely overlooked in this process (Bollen and Ozinga 2013). It is therefore unclear how existing land and resource rights will be taken into account, which is only one necessity in preventing the impoverishment of local people (Deininger 2011). Adaptive management or

community-controlled codification, whereby local people identify and claim rights (as in McGrath et al. 2015; Hoekema 2010) does not appear to be on the horizon. At the minimum, national governments will need to assess to what degree new systems of access and control correspond to current practice and to what extent they are accessible to local user groups.

The caveats derived from these cases will not be a surprise to the EU, which has recognized that “Forests are a component of a system, along with people, their institutions and politics, climate, markets and a host of other variables. When one component of the system is changed the full effect is mainly unforeseen and there are significant impacts on other parts of the system” (European Community [EC] 2012, 51). Nonetheless, the EU bears the responsibility of ensuring sufficient monitoring of the outcomes of the conditions it has imposed on its voluntary trade partners. Assuming that the momentum behind the process is strong enough to maintain the VPAs, a monitoring program, ideally by local resource users or at least accountable to users (Ostrom 1999), is needed to assess the realization of the goals of FLEGT and to record, measure, and mitigate the negative effects associated with the risks enumerated in this article, all of which are likely to occur somewhere at some point.

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Notes

1. In addition to the articles presented here, initial reports prepared by the authors and others as part of the project and in preparation for the IASC are available as supplementary material at www.cifor.org/pro-formal/publications.html (accessed July 23, 2014). When complementary, we refer to those reports in addition to the articles herein.

2. But does not necessarily prevent future alienation, as discussed later.
3. We refer to Levy, Young, and Zürn's (1995) definition of regimes as "social institutions that influence the behaviour of states and their subjects [consisting] of informal and formalized principles and norms, as well as specific rules, procedures and programs . . . unwritten understandings and relationships, as well as the formal legal agreements, that influence how states and individuals behave in any given issue area." See also Smouts (2008) and Overdevest and Zeitlin (2012).

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