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Land Tenure Center

AN INSTITUTE FOR RESEARCH AND EDUCATION ON SOCIAL STRUCTURE, RURAL INSTITUTIONS, RESOURCE USE, AND DEVELOPMENT



TENURE BRIEF

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Whom to pay?

Key Concepts and Terms Regarding Tenure and Property Rights in Payment-based Forest Ecosystem Conservation

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We define key tenure terms related to forests and highlight concepts likely to be encountered in the design, implementation or evaluation of incentive-based conservation programs—such as payments for ecosystem services (PES) or Reducing Emissions from Deforestation and Forest Degradation (REDD). Additionally, we discuss policy options that can clarify property rights and strengthen tenure security.

A NEW WAVE OF INCENTIVE-BASED policy instruments aims to increase the provision of public goods found in forests (such as carbon, water, and biodiversity) by explicitly valuing these goods and paying people to protect them. Yet the world's most carbon-rich and biodiverse forests are found in regions where property rights systems are not well-defined and secure (Figure 1). The content of property rights and the broader land tenure system determine who benefits from forests and who is excluded from benefits. Tenure security determines whether these rights are protected.

These factors impact both the investor and those making use of the forest resources affected by the initiative. The *investor* needs secure rights in the resource. Those rights must be clear and secure to empower the investor to make the needed management decisions and receive the benefits from them. The supporting legal and political environment affects whether even good laws on property rights deliver the needed security of property rights: a confident expectation that one's investments will be protected. The presence or absence of security affects incentives, and thus production decisions, and can increase or decrease conservation actions.

The property rights of those *currently using the resource* will in part determine the benefits they should receive from the payment-based initiative. To the extent that these users have such rights, the project will need to try to include them in benefit streams from the project, or alternatively, to compensate them for loss of their land or foregone income from use of forest products. To the extent that communities claim rights of a customary nature unrecognized by national law, failure by the initiative to recognize the rights and the benefit streams associated with them may create tensions around the initiative that imperil its sustainability. This is a particular problem in developing countries where the enforcement capacity of governments may be weak, and heavy reliance must be placed on incentives for local communities in supporting the conservation objective.

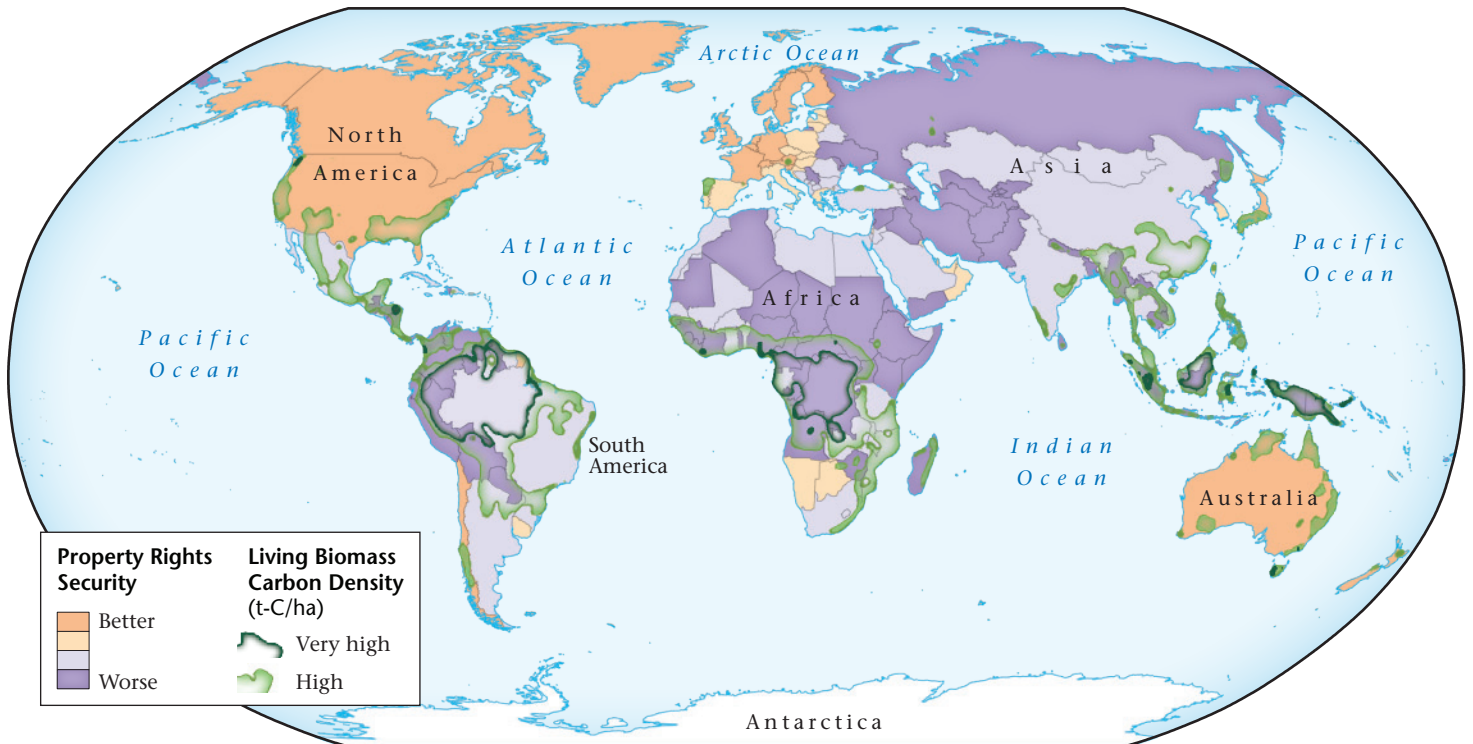


Figure 1: Overlap between forest carbon and property rights security
 Source: UW Cartography Lab, Source Info: Worldwide Governance Indicators and Gibbs.
http://cdiac.ornl.gov/epubs/ndp/global_carbon/carbon_documentation.html

In short, tenure concerns “whom to pay?” and thus has profound implications for the equity and efficacy of payment-based programs. A number of publications have highlighted the challenges of implementing PES or REDD programs in countries with poorly defined or weak property rights (a select sample include: Angelsen 2008; Cotula and Mayers 2009; Springate-Baginski and Wollendberg 2010). One concern is that such programs could undermine indigenous rights to forests (for example: Phelps et al. 2010; Sandbrook et al. 2010; Sikor et al. 2010); however, others are optimistic that these programs could be used to strengthen property rights (Box 1). Although the importance of tenure in incentive-based conservation programs is recognized, too often debate lacks clarity and consistency regarding definitions and uses of tenure terminology. Such ambiguity in terms is not an academic concern: the way resource rights are described and compartmentalized affects politic struggles.

“Forests will remain remote, but they will be carved up, controlled and used as global political bargaining chips like never before. This makes the prospects for conflict and violence much greater.”
 (Rights and Resources 2009)

“By monetizing forest carbon, REDD+ will substantially increase the market value of forests, including those previously considered marginal, incentivizing central governments to increase control.” (Phelps et al. 2010)

“The Niger Acacia Senegal Plantation Project has contributed to increased land tenure securitization in the project area mainly by designing innovative institutional arrangements to clarify carbon ownership, which would allow the BioCF to engage in a carbon transaction in the country.”
 (de Aquino et al. 2010)

Box 1: Quotes on REDD and indigenous land rights

1. Defining Land Tenure and Property Rights

Too often land tenure is conflated with land title, an error of simplification that potentially acts against poor or indigenous communities. Land tenure means the *right* to hold and use land, rather than the simple fact of holding land. One may have tenure but may not have taken possession. Land tenure implies a property right, and indeed the terms **land tenure** and **real property rights** (rights in land and things permanently attached to land, such as trees and buildings) can be used virtually interchangeably. Economists and social scientists tend to write of land tenure, while lawyers and those unspecialized in land matters tend to work with the term property rights.

Consider the two basic tenures in western property systems: **freehold** and **leasehold**. Under freehold, land is held free of obligations to the state, such that land can be bought, sold, rented, inherited or subdivided. The term is synonymous with private ownership. Leasehold is when land is rented from the owner to use for a specified period.

Land tenure has often been described as a “bundle of rights,” reflecting the fact that for a given resource there may coexist different use rights held by different holders. This is illustrated in Figure 2.

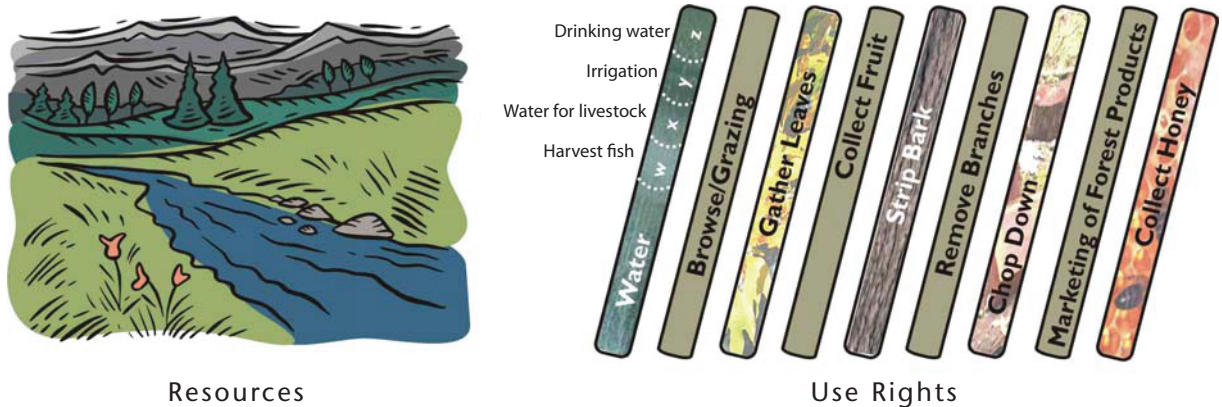


Figure 2: Land tenure as a “bundle” of rights
Source: Aggarwal and Elbow 2006, p.7.

One way in which tenure is characterized is in terms of the particular resource or asset to which the right applies. One may speak of land tenure but also more broadly of **resource tenure** (rights to land, water, trees, and other natural resources), or more narrowly of **forest tenure**, **tree tenure**, or **carbon tenure**.

For PES and REDD initiatives, the term carbon tenure has special significance. This term has only come into use recently, in connection with the desire to make the right to carbon credits marketable. Figure 3 illustrates the concept.



Figure 3: Unpacking carbon tenure
Source: Authors’ rendering of carbon tenure concepts from Takacs 2009.

Key carbon terminology

- Sequestered carbon**
process of removing carbon from atmosphere:
afforestation, reforestation
- Carbon sinks**
natural or artificial reservoirs for carbon: forests, soils
- Carbon sequestration potential**
right to manage carbon sink to maximum potential
- Carbon credits**
rights generated from a carbon sequestration project

The use of the term carbon tenure reflects a desire to achieve a clear specification of the nature of the right to carbon, but it also often signals a desire to separate carbon rights from other rights in the resources in which the carbon exists. In most legal systems, carbon rights are not provided for, and where there are no specific legal provisions the rights to carbon are included in rights to the object concerned. For instance, land tenure, which normally includes trees as permanent attachments to land, includes the carbon rights in those trees. If the law specifically provides for tree tenure as distinct from land tenure, the rights to the tree then includes the rights to the carbon in the tree. Where carbon rights are specifically provided for in law, they become distinct from the general rights to land and trees, and marketable. In the case of carbon sinks, the use of the term carbon rights can separate out the rights to carbon in resources such as carbon sinks from the more general rights to the land itself.

The term carbon tenure may clarify who has rights to carbon, but in the case of resources such as trees, it is not clear that the rights to the tree and rights to the carbon are separable in any meaningful way. Assertion of a carbon right in the government, for instance, deprives the trees and the land on which they stand of some of their value. This makes assertion of carbon rights in government politically contentious, as when popular anger forced the government of New Zealand to withdraw a claim to own carbon (Cotula and Mayers 2009).

A **land tenure system** is all the types of tenure recognized by a national and/or local system of law taken together, and the institutions that administer them. In a locality, one may find private freehold of residential plots and farmland, leases and mortgages of residential properties and farms, common property in grazing land, and local or national government ownership of parks and roads. A land tenure system cannot be understood except in relationship to the economic, political, and social systems that produce it and that it influences. Tenure systems are characterized by country or type of economic system, as formal (created by statutory law) or informal (without legal recognition), and as imported or indigenous.

Land tenure systems in many countries with PES and REDD initiatives are characterized by considerable diversity, reflecting their **legal pluralism**. That is, there are within those countries a number of different and co-existing kinds of land tenure with different origins. This is illustrated in Figure 4.

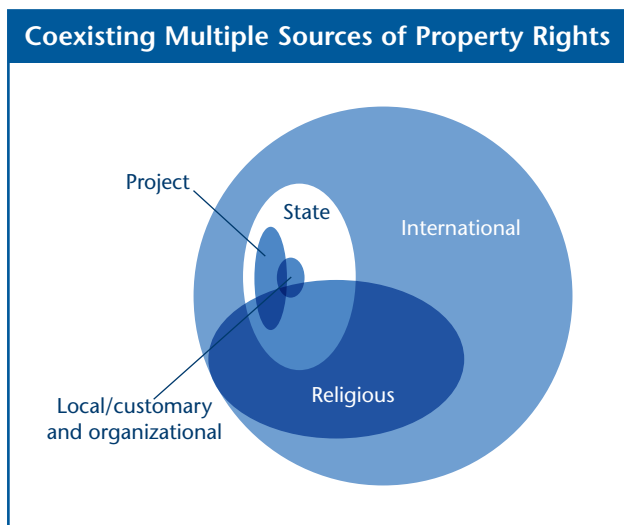


Figure 4: Coexisting Multiple Sources of Property Rights
Source: Meinzen-Dick et al. 2004, p.7.

As indicated in Figure 4, in many contexts national law (the law of the state) is only one type of law in play. International law may create property rights, as for example the rights of indigenous peoples, or the rights of returning refugees to restitution to land from which they have been displaced by violent conflict.

Customary rights in land also may exist, recognized or unrecognized by national law. There may be further rights based in religious law as well, such as the right of religious endowments in tree plantations in Muslim countries. "Project law" may exist where the legal agreements between investors and government in effect create a mini-legal regime for the area of the project, as may be the case with a REDD initiative. Those various kinds of tenure may apply to different geographic areas of a country or may coexist locally and interact in complex fashions.

A given landholder may hold land under a number of different tenure types: he or she may cultivate land held under a registered ownership right provided under national law, lease land on a plantation that is a religious endowment, and hunt and gather in forests to which his or her community claims a customary right. PES and REDD initiatives will find themselves dealing with resources for which use and ownership rights are affected by a number of these bodies of law and tenure. It is important to bear in mind these other sources of tenure claims when interpreting general figures (see Figure 5).

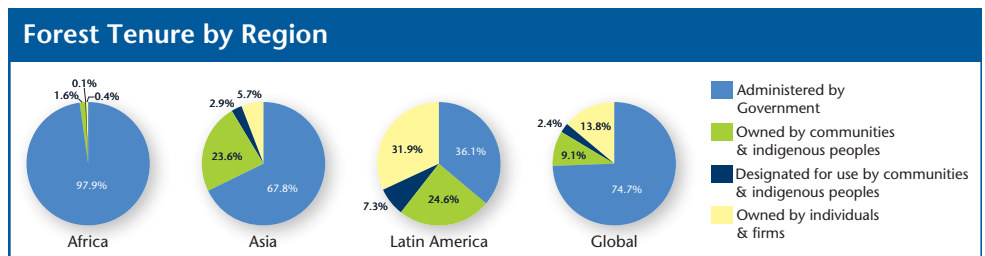


Figure 5: Forest Tenure by Region (2008)
Source: Rights and Resources 2009, p.6.

While the pie charts in Figure 5 may be technically correct, they hide the complexities of legal pluralism. It should be noted that governments in Africa often claim ownership of extensive areas, but do not in fact control most of the forest land involved, much of which is occupied by forest-dwellers or forest-fallow cultivators under customary rights. Conversely, land legally designated as indigenous reserves in Latin America may be *de facto* used by other parties against the wishes of indigenous groups.

2. Key Tenure Concepts

The following terms focus on who has rights to forests (i.e., tenure content) and the security of those rights (i.e., tenure security).

2.1 Actors and rights

Identifying key actors in a given forest and their respective rights is a crucial first step to designing benefits under programs like PES and REDD. Interactions among these actors, investors, and intermediaries will vary across contexts and countries.

Private Property

Private property is when one person holds rights to forests or when forests are held by groups considered legal persons, such as corporations or partnerships. Use of the term **individual property** can indicate that an actual person rather than a legal entity is the rights-holder. While private property is often used synonymously with private ownership, this is not technically correct: leasehold held by a private person is also a form of private property.

Common property

Common property is not a legal term, and its use is not always consistent. Economists use the term for a **commons** that is in fact managed, to distinguish it from a free-for-all. Conversely, generalists often use the term interchangeably with “commons,” or as a short-hand label for any non-Western, custom-based “communal” property regime.

A **commons** is an area on which all landholders of a locality have a right to activities such as grazing livestock or gathering wood. Historically, this is not a form of ownership but a pattern of legally guaranteed use: all members are free to use the land simultaneously. Most commons have rules limiting use (limiting the seasons for grazing, limiting types of livestock, etc.) and only community members have a right to use the resources. A defining feature of a common property system, as used by economists, is that there are rules in place.

In contrast, **open access** is used to describe shared simultaneous use of a resource without rules or controls. Where local communities hold and use forest land, they may manage it as a commons involving shared use of the resource by community members, but in other cases the forests may be open access resources used by members of several communities.

Communal tenure

Communal land tenure describes tenure that involves a large amount of community control over land use. The community is regarded as having a primary right in the land and allocates land to its members for cultivation and other uses. Thus members’ rights are typically characterized as **usufructuary rights** (or **usufruct**). This implies a long-term right for an individual or household to use land and may include inheritance rights, but does not imply a right to sell the land. In fact, the community may retain the right to reallocate landholdings among its members.

A communal land tenure system usually includes both private use rights to home plots and farms allocated to households or individuals, and also common property in other resources such as grazing land or forest. Private use rights are often inscribed within a broader communal regime. The term “communal tenure” is not legal, but a term developed by Western social scientists to describe non-Western property systems. Overall, communal tenure is more prevalent in developing countries than in developed countries, and has particular importance for indigenous or tribal peoples residing in tropical forests.

Public property

Public property refers to forests held by any level of government. Much forest land is owned by governments, and there are a variety of ways in which this land is designated for forest-based land use. Public forests include both production forests (e.g., plantations or timber reserves) and conservation forests (e.g., parks or reserves). Across the tropics, public forests are subject to competing claims and illegal capture of resources.

Leases, concessions and easements

Land is sometimes **leased** to private operators who use the land for forestry. In that case rent is paid, but the lessee has the full benefit of the forestry activities. For large forestry operations, the land owner, often a government, instead grants a concession to a private operator. A concession is similar to a lease in that it is for a specified period of time, but, unlike a lease, a **concession** is given to accomplish a specific purpose that the owner wishes to achieve and with provision for the owner to share directly in the benefits of the forestry operation rather than simply taking a rent. Forestry concessions involve a transfer of rights to harvest timber but do not convey rights to any of the other benefit streams on that piece of land. Nonetheless, hunting and other non-timber forest use is the norm in tropical timber concessions. Payments are often related to a volume of sales or resources extracted, rather than a fixed annual rate as in the case of a rent.

Beginning in the 1990s, conservation organizations began using the regulatory framework for timber rights to outbid logging companies and establish **conservation concessions** to tropical forest. This approach is more agile and flexible than campaigning for the designation of a certain area under park or other permanent conservation status. The disadvantages are that it is temporary (often 20-40 years) and may result in counter-incentives to creating national parks.

Easements can also be used to legally transfer use rights to land but involve giving up or donating particular rights in exchange for reward (e.g., tax reduction or exemption). For example, a conservation easement on a piece of land involves giving up the right to develop that land or grow crops for a given time period. Given the generally weak status of tax collection in remote forested lands, counting on tax reductions as incentives to conserve forest is unwise.

Conditionality

Some land titling programs place **conditionalities** on receiving title—for example, the owner of the newly titled land is prohibited from subdividing his or her land, or selling it for a specified period. Enforcing these conditionalities has a mixed record. In Ecuador, the land agency once prohibited the sale of newly titled land for a five-year period in an effort to reduce land speculation. This conditionality was later repealed when it became clear that closely monitoring land sales was impractical and in some cases, politically difficult (Morales 2010). In many cases, since the state lacks capacity to fully monitor these conditionalities on land, enforcement is ad hoc and subject to corruption. This can lead landholders to revert to informal institutions, which in time can undermine the legal system. Inconsistencies across state policies—for example, opposing agendas in environmental versus agricultural agencies—also can undermine conditionalities.

In the case of forested land, titling efforts at development frontiers historically required claimants to clear forest in order to receive title (particularly in Latin America). More recently, some land titling efforts have promoted pro-forest conditions. New land owners are obliged to forgo forest clearing activities and/or maintain a certain percent of land in forest in order to receive land title (e.g., rewards for ecosystem service payments in the Sumberjaya watershed in Indonesia, see Wendland et al. 2010). The effectiveness of pro-forest conditionalities is uncertain and depends on strength of land management institutions. Economic and political changes may also threaten conditionalities over time. For example, in the Brazilian Amazon, families that were granted forested land for Brazil nut harvest, rubber tapping or other non-timber uses during the 1990s have since turned to cattle as access improves and economic trade-offs shift (Vadjunec and Rocheleau 2009). Expropriating land due to failure to comply with pro-forest conditionalities is costly and politically fraught. Those working today to formalize or title legal ownership in forest regions should be aware that it is unrealistic to rely on new land owners to uphold pro-sustainability conditionalities when there are powerful socioeconomic forces pushing those land owners to clear forest.

Protected areas

Protected areas are one type of public conservation forest; they cover about 12% of the terrestrial surface (Coad et al. 2009). The contribution of these forests to PES and REDD schemes is gaining traction, but critics point out that those in protected areas are legally pledged to conserve forest. Thus, paying for them to do so, does not offer additional benefits. Others counter that clearly documented deforestation in parks signals the need for additional payments. Furthermore, donors often overlook the multiple claims to land by individuals

or communities (with and without formal title) within protected areas (see Figure 6). Resolving tenure disputes in protected areas often is a lengthy and contentious process, which can itself accelerate deforestation (Pinel 2009).

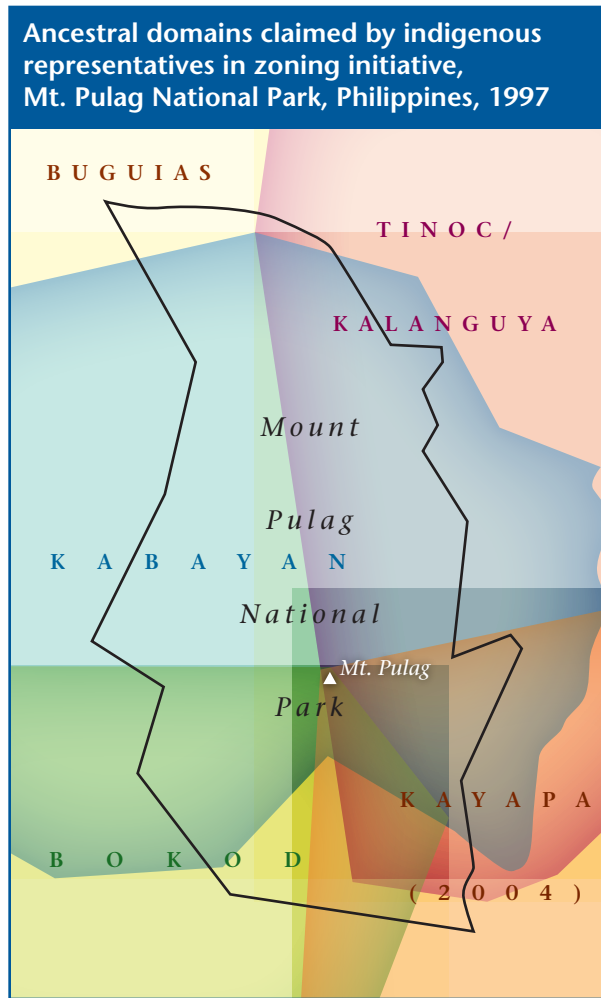


Figure 6: Protected areas and tenure overlap
Source: Reproduced by UW Cartography Laboratory from Pinel 2009.

2.2 Tenure security

Tenure security is often more important than legal classifications of land ownership. Tenure security refers to the assurance aspects of property rights, or the expectation that rights will be protected or renewed. It depends both upon the robustness of the rights but also upon a legal and political environment that supports property rights.

Insecure tenure increases the risk that property will be expropriated or simply taken and reduces incentives to invest in property. In the tropics, insecure tenure is often associated with deforestation since cultivated land often conveys more secure use rights than forest. Empirical research suggests that insecure tenure increases deforestation rates because the value of timber from the forests is worth more today than it might be in the uncertain future (Arnot et al. forthcoming). On the other hand, insecure tenure can decrease investments in capital-intensive natural resource use, such as logging. Another aspect of tenure security is the duration of tenure, which is related to incentives for long-term investment in forests. The reason people with a one-year lease will not plant trees is that they have no expectation of being able to use the wood. Security of tenure relates to the time needed to recover the cost of an investment. When tenure is too short or too uncertain for most investments, economists say that the landholder lacks security of tenure.

Even if the tenure is secure for the lifetime of the holder and inheritable by the children, some commentators consider it insecure if it cannot be freely bought and sold. Here, security of tenure requires full private ownership. This usage is common among strong advocates of private market-based ownership. While both duration of tenure and a full set of rights affect investments in sustainable forest management, and transferability is important to making carbon rights mar-

ketable, a stricter definition of tenure security refers specifically to the assurance that the rules of the tenure system will be enforced and property rights will be protected.

Although strengthening tenure security is no guarantee that forests will be conserved, insecure tenure will usually lead to deforestation by smallholders. Moreover, without secure tenure the profits associated with payment-based forest conservation are less likely to flow to local claimants and may require persons or groups to expend time and resources defending rights.

3. Clarifying And Strengthening Land Tenure

Assessments of using incentive-based instruments for conservation of forest public goods conclude that property rights must be clarified or strengthened before payments can begin to ensure that local people do not lose out. Although many observers see payments as a source of tenure risk or recentralization of forest ownerships, others are hopeful that programs like REDD will lead national governments to reform land tenure and improve governance. Given the high stakes for marginalized people, poor countries, and globally significant ecosystems, it is critical that current tenure content and security are well understood before prescriptions to clarify or strengthen tenure are adopted. Clarifying and strengthening land tenure is complex and often politically contentious, but is not an insurmountable task and can sometimes be done within the conservation project itself. In the best case scenario, such efforts will improve forest governance whether REDD or PES projects take hold or not.

Property rights reform

One way to strengthen land tenure is to reform property rights to confer more robust rights on the holder. This occurs through legal measures that increase the rights involved in the tenure in which the land is held. This is also referred to as **land tenure reform** and so distinguished from **land reform**, which involves redistribution of land. For example, if the land is held by a private holder in a temporary use right, and the law is changed to upgrade such rights to something closer to full ownership, then tenure security is enhanced. A similar strengthening can be provided by the state recognizing customary rights. For example, demarcating indigenous reserves or publicly clarifying laws protecting indigenous authority for their land can strengthen tenure.

Titling and registration

Legal reform can create stronger property rights, but these will be more effective in providing security of tenure if the holder of the resource has received from government a title, linking his or her rights to a particular and clearly identified parcel of land.

Security of tenure can be enhanced further if there is an official, public record of the rights, in which transfers and inheritances can be registered. Most countries have at least a voluntary system for **registration of deeds**, while others have more ambitious systems of title registration, which are often implemented systematically with each parcel in a designated area surveyed, titled and registered. The process of titling and registration can be a time-consuming and expensive process, as illustrated in Figure 7.

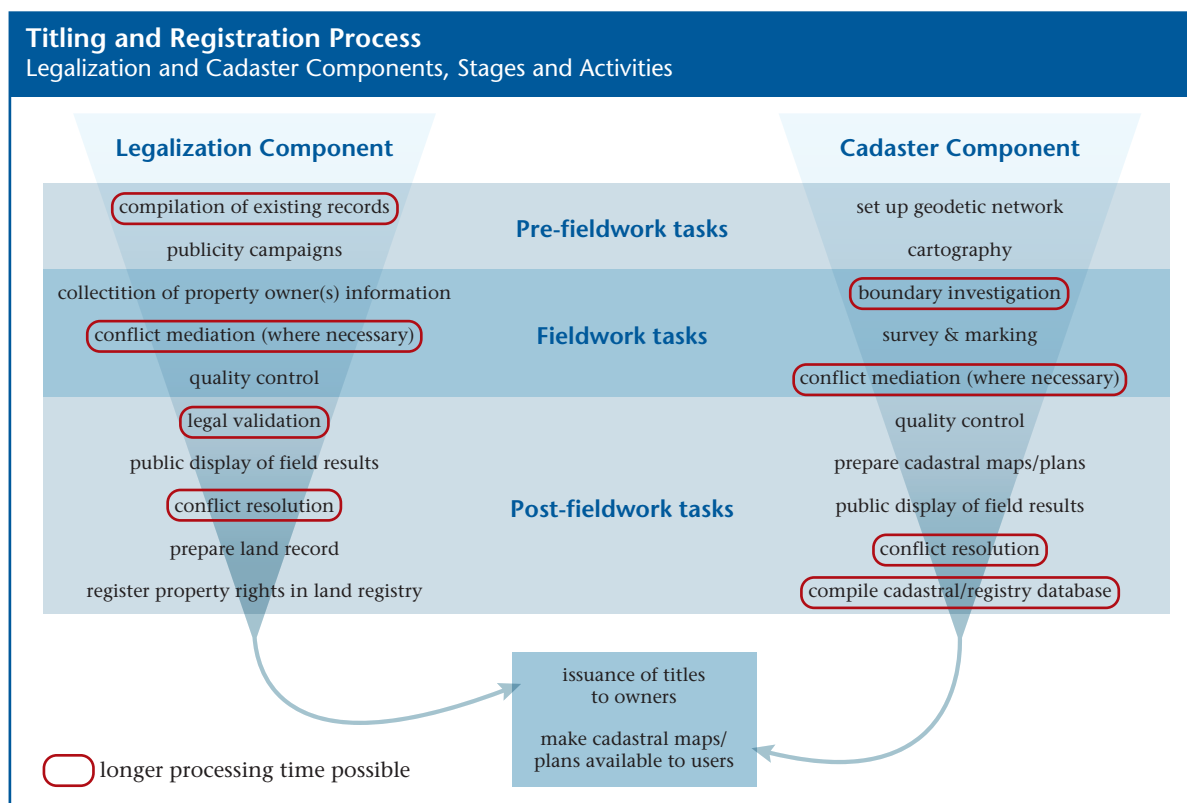


Figure 7: Titling and registration process

Source: Produced by S. Lastarria-Cornhiel and T. Buckingham. Source information: Barnes 2002 and Burns et al. 2006.

Given the urgency of forest conservation, it might not be practical to wait for national-level titling or registration processes in payment-based conservation initiatives. Rather, in some cases the titling process can be built into the PES or REDD project itself, as in the case of the Sumberjaya project in Indonesia (Wendland et al. 2010).

Survey

PES and REDD projects at a minimum require a **survey**, which is the process of demarcating and recording the boundaries of a parcel of land so that the boundary can readily be reestablished in case of disputes. A **cadastral survey** produces a cadastre or cadastral map that shows parcels and their owners and can be used as the basis for a land tax. A map can be recorded on an aerial photograph or on remote sensing imagery. If

there has been a geodetic survey of the region (which takes into account the curvature of the earth), there should be a geodetic network, and the location of the parcel can be established by reference to two points in that network that are visible from the parcel. The geographic positioning system (GPS) locates the point in relation to orbiting satellites.

Formalization

Formalization is a broad term that can cover all or some of the measures mentioned above: recognition, titling and registration, and survey. It is most often used to describe these processes in relation to informal land holdings, whether they are rural or the large informal settlements that have developed around many of the world's cities in the rapid urbanization of the past decades. It is sometimes also used, less appropriately, for the same processes in relation to land held under customary tenure.

Formalizing land tenure can provide greater security of tenure, but it *will not be sufficient* unless it is accompanied by improvement of mechanisms to enforce rights and adjudicate disputes, or by other measures. It is a relatively expensive and time-consuming process and many critics have called for simpler systems implemented by the communities themselves.

Local participatory methods

Participatory approaches to land-use planning—such as participatory land delimitation, participatory zoning, and participatory GIS—are ways to empower local communities in land-use processes. Used in some REDD projects, these approaches are particularly relevant in areas with large amounts of communal land tenure and can be used as part of a formalization process or when formalization is not being done. In the latter case, demarcating land through community processes can provide valuable information to community members before project start up.

Although participatory zoning projects typically focus on *where* resources should be preserved or extracted, they also designate, explicitly or implicitly, *who* has authority and access to these areas. Zoning aims to promote broad societal benefits, but this may cause some claimants to lose access to certain rights, while others gain (or regain) access. Effective zoning requires bringing these often competing groups together to negotiate rules transparently and democratically for managing use and avoiding conflicts. Thus, new national policies promoting participatory planning open opportunities for negotiation but can also create confusion. Amid shifting and/or ambiguous policies, local stakeholders will be reluctant to compromise in land use planning exercises.

Supporting mechanisms

The success of each of the initiatives listed above depends on the ability of a country's legal and political system to enforce and protect these rights. Investing in governance at the national and sub-national level will be critical for PES and REDD (see Figure 1) and may need to be budgeted within project design (see Box 2).

In Ecuador, one PES initiative has included institutional capacity building in the project budget. This project is helping build capacity within local legal agencies in an effort to facilitate resolution of tenure conflicts and support legal action. Strengthening governance and capacity are not activities covered by PES or REDD payments. In Ecuador, government and non-governmental agencies are providing the money for these start-up costs. Long-term budgeting for legal support may be necessary for the success of this project and other PES and REDD initiatives in the tropics. However, these costs do not have to be prohibitive. In Ecuador, the cost of building institutional capacity is approximately \$5 per hectare on top of the \$20 per hectare that pays local communities for forest conservation.

Box 2: Investing in local institutions

Synergies with national governments and other organizations working on economic development or poverty alleviation in these countries can be beneficial in such efforts. Of course, building capacity at local and national levels is not a trivial task. Nonetheless, some of the planet's most carbon-heavy and biodiverse forests are found in areas where investments in governance and land tenure are essential for programs like PES or REDD to succeed.

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