Seeing People Through The Trees
Scaling Up Efforts to Advance Rights and Address Poverty, Conflict and Climate Change
THE RIGHTS AND RESOURCES INITIATIVE

The Rights and Resources Initiative is a global coalition to advance forest tenure, policy, and market reforms. RRI is composed of international, regional, and community organizations engaged in conservation, research, and development.

The mission of the Rights and Resources Initiative is to promote greater global action on pro-poor forest policy and market reforms to increase household and community ownership, control, and benefits from forests and trees. RRI is coordinated by the Rights and Resources Group, a non-profit organization based in Washington D.C. For more information, visit www.rightsandresources.org.

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## ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>A/R</td>
<td>Afforestation and Reforestation</td>
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<tr>
<td>BRIC</td>
<td>Brazil, Russia, India and China</td>
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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<td>CIBC</td>
<td>Canadian Imperial Bank of Commerce</td>
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<td>CIFOR</td>
<td>Center for International Forestry Research</td>
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<td>DFID</td>
<td>UK Department for International Development</td>
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<td>DRC</td>
<td>Democratic Republic of Congo</td>
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<td>EU</td>
<td>European Union</td>
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<td>FSC</td>
<td>Forest Stewardship Council</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>GIS</td>
<td>Geographic Information System</td>
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<td>GPS</td>
<td>Global Positioning System</td>
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<td>IDRC</td>
<td>International Development Research Centre, Canada</td>
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<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<td>LULUCF</td>
<td>Land Use, Land Use Change, and Forestry</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>NORAD</td>
<td>Norwegian Agency for Development Cooperation</td>
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<td>NGO</td>
<td>Non-governmental Organization</td>
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<tr>
<td>ODA</td>
<td>Official Development Assistance</td>
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<tr>
<td>PES</td>
<td>Payments for Ecosystem Services</td>
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<tr>
<td>PNG</td>
<td>Papua New Guinea</td>
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<td>REDD</td>
<td>Reduced Emissions from Deforestation and Degradation</td>
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<td>Swedish International Development Cooperation Agency</td>
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<td>Small and Medium-sized Forest Enterprise</td>
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<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>VPA</td>
<td>Voluntary Partnership Agreements</td>
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<td>WDPA</td>
<td>World Database of Protected Areas</td>
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INTRODUCTION: FOREST AREAS—FROM HINTERLAND TO CENTER STAGE

The coming decades will present the world with many daunting challenges. Global markets and political structures are shifting and the global development agenda—which only recently peaked with the identification of the Millennium Development Goals (MDGs)—has lost ground to the more politically pressing issues of security: food security, energy security, political security and ecological security, including climate change and the growing water crisis. Booming global market demands and political reactions to security concerns are increasing pressure on forest areas and forest peoples—who are already disproportionately poor and disenfranchised.

More than ever, the markets and politics of forest dwellers are interlinked with those of the global community. Our fates are intertwined: our consumption affects their forests; our carbon dioxide (CO2) emissions, their forests.1 The forest frontier continues to recede, the landscape is being transformed; the risk is high that millions of people will be pushed further into poverty and conflict and that distinct cultures will be pushed to extinction. How tensions over forests play out in coming decades will influence the severity of climate change, the course of wars and civil conflicts, and the health of the world that our descendants will inherit.

Yet, despite fifty years of effort, few development interventions in forest areas have worked in favor of either the forest dwellers or the forests. A new approach and urgent action are needed. In this paper, we argue that recognizing and strengthening the property rights of forest communities is the first and most important step towards avoiding impending social and political collisions and establishing the sound institutional footing needed for social and economic development in forest areas. We also argue that with robust and proactive steps, climate change and the global response to it can be converted from a major threat to a major opportunity to address these challenges. Action on rights and governance will also produce benefits not otherwise possible and yet critical at national, regional and global levels.

CRUX OF THE PROBLEM

The United Nations Conference on the Human Environment, held in Stockholm in 1972, was one of the first international forums to recognize the link between rights, wellbeing and the environment. It issued a declaration which pledged to protect fundamental rights to freedom, equality and an adequate standard of living, and to safeguard the environment. In 2000, global leaders met again to set the MDGs, pledging to halve poverty and to make substantial progress on other social and environmental goals by 2015. Nevertheless, 35 years after the Stockholm conference and with just seven years to go before we reach the target date of the MDGs, the gap between aspirations and achievement is still wide; in many forest areas it is as wide as ever.

Increased national and global insecurity is often driven by the same underlying problems that gave rise to the Stockholm conference and the MDGs: the inadequate recognition of human, civil and political rights, the political and economic marginalization of rural and forest communities, widespread rural poverty, and weak and unrepresentative governing institutions.

Such problems are stark, and longstanding, in forest areas. Many forest communities, particularly in developing countries, are chronically poor and badly governed. They suffer disproportionately from
conflicts, humanitarian crises and corruption, which often then spread nationally and internationally. The property rights of forest communities are widely unrecognized, and the human, civil and political rights of indigenous peoples, women and other marginalized groups in forest areas are frequently limited. More than 30 forested countries have experienced widespread violent conflict over the last 20 years, much of it caused by ethnic tension and the inequitable distribution of resources. The violent reactions to the disputed presidential election in Kenya in late 2007 were driven in large part by historical grievances over land and access to natural resources and are a vivid reminder of the vulnerability, and fragility, of much of the developing world.

**LINKS BETWEEN RIGHTS AND OTHER MAJOR GLOBAL CHALLENGES**

Poor governance and a lack of rights exacerbate a host of other global challenges. According to the United Nations Framework Convention on Climate Change (UNFCCC), at least 20% of global CO₂ emissions stem from deforestation, forest degradation and land use change, while the World Bank estimates that governments around the world are losing US$15 billion a year as a result of illegal logging. Perhaps even more alarming is the heightened threat posed by many of the world’s most infectious diseases, including ebola, yellow fever, dengue, malaria, Severe Acute Respiratory Syndrome (SARS) and Simian Immunodeficiency Virus (SIV), because of tropical deforestation, fragmentation and associated land-use change, which increase the prevalence of disease vectors and the risk of exposure and outbreaks. The most vulnerable and disenfranchised people are most at risk to such environmental threats. Women, who bear much of the burden of collecting and marketing forest products, are also vulnerable to abuse in the selective enforcement of forest laws and regulations—another feature of inequitable governance.

It is unsurprising that forest areas are characterized by social and political underdevelopment and injustice. Urban-based political, economic and environmental elites have maintained official public ownership over forest areas and exploited them for their own benefit. Latterly, these external elites have used technically focused public forest agencies to implement national or global notions of the public good—overwhelming local rights and aspirations. Social, economic and environmental development programs have often fallen into the trap of impositions—treating forest areas as hinterlands to be exploited for the social and economic benefit of others, to be protected on another’s behalf, or to provide environmental services on someone else's terms. For the most part, indigenous and non-indigenous forest communities alike have been unable to use forests to pursue their own development.

Many in the development community now realize that recognizing and securing land rights, strengthening civil rights, and introducing more democratic governance systems in forest areas is critical not just for moral reasons but also to achieve national and global social, economic and environmental goals. They recognize that fair and secure rights to natural resources, particularly land, are fundamental building blocks in any viable strategy for dealing with climate change, reducing poverty, achieving equitable economic growth, protecting the environment, and strengthening resilience against unforeseen future shocks, crises and opportunities.
Nevertheless, many others are yet to acknowledge the need to change development models and to shift from privileging external views to recognizing local rights, governance and voice in social and economic development. Moreover, the development programs and approaches proposed to deal with the broader set of security challenges now facing national and global leaders have not yet been rethought or redesigned to reflect the pivotal role that rights and governance must play.

URGENCY AND RISKS

The urgency of redressing the balance in favor of local development, rights and resilience is greater than ever. The dramatic shifts under way in markets, politics and the planet’s climate create new and very large challenges for achieving peace and prosperity in forest areas; in many cases they imply an increased risk of and vulnerability to violent conflict. The rapidly expanding global economy and the booming demand for food, basic commodities and energy all increase the pressure on forest peoples, who increasingly compete with each other for a diminishing amount of available land. Local populations are growing, too, increasing landlessness and migration and local pressure for the privatization of commonly-held land. Climate change is affecting the ecology and ranges of the flora and fauna on which forest peoples depend, diminishing livelihood security. Some of the proposed approaches to reducing CO₂ emissions from forests threaten to criminalize traditional land use such as shifting cultivation and thus to exacerbate tensions.

In the past decade the area of forest designated as public parks and protected areas has almost doubled, most often at the expense of the people who inhabit or depend on these areas. The relative weakness of local organizations and a lack of safeguards and accountability facilitate what has been called the “great green land grab”, in which private investors and conservationists rush to lock up natural forest areas before they can be converted to other land uses. In sum, this new set of pressures raises the risk not only of greater poverty, social exclusion and civil conflict among forest peoples, but also of increased CO₂ emissions from continued or increased deforestation and forest degradation.

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Security issues are prominent in national and global agendas for good reason, and they converge in forest areas. The world is entering a new and, in many ways, frightening era; governments face dilemmas that few are equipped to resolve. If forest agencies and international forest development programs were not designed for or prepared to deal with the current set of issues, they are even less prepared for the challenges of the future.
REASONS FOR HOPE

Ironically, after centuries of serving the interests of others, forest dwellers and other rural peoples might hold in their hands the fate of the wider world. They are organizing themselves and gaining strength—both to advance their agendas for political and social development and to engage more effectively in economic activities and enterprises that enhance their wellbeing. These steps are aided by improved communication and transparency, both within countries and across the globe and by the availability in rural areas of new mapping tools. All of these trends increase the ability among forest dwellers and other rural peoples to hold the rest of the world accountable for its actions.

Encouragingly, too, some governments are beginning to rethink and rationalize property rights in forest areas, recognizing the territorial rights of local communities and indigenous peoples and attempting to clarify the property rights of households and individual citizens. About one-half of all agrarian states—those countries whose economic structures are dominated by agriculture—have tenure reforms under way including, in most of those countries, forest tenure. Tanzania, for example, has been a leader by establishing clear community ownership over land as the foundation for forest conservation and development and thereby influencing trends across Africa. Brazil and other countries in Latin America have increasingly recognized the territorial rights of indigenous peoples. In the last two years alone, new forest tenure policies or legislation have been adopted in Brazil, Bolivia, China, Indonesia, India and Russia—affecting almost half the world’s forest areas.

“The phenomenon of tenure change is not limited to developing or middle-income countries. Over the last several decades, Canada, the United States, Norway, and Australia, for example, have all taken steps to restore customary ownership over rural lands to indigenous peoples; in all cases, negotiation and litigation over the recognition of rights is ongoing. Forest agencies increasingly accept the importance of secure property rights in putting the forest sector on a sound institutional footing and the need for transparency in order to achieve effective public governance. Some governments are beginning to reverse historical obstacles to social inclusion by allowing rural people and civil-society organizations to truly participate in forest governance.

Opportunities are also growing for local people to participate in and benefit from forest markets and, thereby, to achieve significant gains in income. Many in the private sector are realizing that poverty and unclear tenure pose risks to their investments; they see business advantages in encouraging governments to reform forest tenure and in partnering with communities and smallholders to supply forest products and services.

Some leaders of the conservation movement are also reconsidering their approaches. They are discovering: the myth of empty wilderness; the millions of refugees produced by the establishment of public protected areas; the moral dilemmas posed by illegal or unjust environmental protection; the limited ability of publicly owned protected areas to achieve conservation objectives; and the capacity of local communities to carry out their own conservation efforts. Some conservation organizations are beginning to consider rights-based approaches, giving hope that a new movement will emerge that both respects rights and democratic governance and achieves more effective conservation.
The global development community has never had a greater opportunity to achieve lasting, positive impacts. Now, perhaps more than ever, the arguments are compelling for helping governments, communities and private-sector actors to pursue equitable governance and development in forest areas. The next few decades are critical, not only for addressing climate change but also for reducing the social, ecological and political risks that drive rural resentment. Clearly, action is needed now—before the scale of these challenges grows even greater and more complex.

The aim of this paper is to assist the development community to make best use of its opportunity by: 1) pointing out the lessons learned from past experience and the necessity of rights-based approaches; 2) setting strategic directions; 3) showing how to prioritize approaches that strengthen local rights, governance and economic development; and 4) advocating a dramatic scaling up in the level of investment and effort, in particular by using as a framework the threats and opportunities posed by climate change.
“Turning and turning in the widening gyre, The falcon cannot hear the falconer; Things fall apart; the center cannot hold; Mere anarchy is loosed upon the world.”
—William B. Yeats, The Second Coming

“He has put a knife on things that held us together and we have fallen apart.”
—Chinua Achebe, Things Fall Apart

1.1 THE HINTERLAND TODAY: LIMITED RIGHTS, POVERTY, CONFLICT AND LOW ECONOMIC GROWTH

Although development aid and cooperation can claim successes over the past five decades, few of these have been in forest areas. In most countries, poverty rates are highest in remote rural areas, including forests. Economic growth in forest-rich developing countries (those developing countries with one-third or more of their territories forested) lags behind that of developing countries with little forest cover.

**LIMITED RECOGNITION OF RIGHTS AND EXTENSIVE POVERTY**

In much of the developing world, the human, civil and political rights of forest-dwelling communities, including indigenous peoples, are denied or insecure. Governments in developing countries claim ownership and assert direct control over some 75% of the total area of forest lands, even though indigenous peoples, local communities and households have legitimate, longstanding customary ownership of much—in many places the majority—of these lands. The property rights of new settlers and migrants are similarly unclear and often controversial. Forest and land laws commonly ignore, limit or deny the rights of local communities and indigenous peoples in forests. Even in countries where land rights are recognized, rights to use and benefit from forests are often heavily constrained by forest and land use regulations. This lack of recognition of local rights contradicts international human rights laws widely ratified by developing country governments, which require the recognition of human, civil and political rights, including the right of indigenous peoples to own, use, control and manage the lands and natural resources they have customarily occupied or used.

Whereas international laws require the recognition of customary systems of ownership, national-level legal regimes often provide for inappropriate titling, the parcelling of communal lands into individual titles, or titling to only small parts of more extensive communal territories. In addition to serious limitations on land rights and limited respect for customary governance systems, such regimes often fail to provide legal recognition to local people, including indigenous people, as individual citizens, communities or peoples. An estimated 15 million people globally are
effectively stateless because they lack birth
certificates or civil registration. These problems
are particularly acute in rural forest areas: many
among the ‘hill tribes’ of Thailand and the ‘Pygmies’
of Central Africa, for example, lack papers to prove
citizenship and so are unable to secure rights
to their ancestral lands or to effectively engage
as citizens. Cases brought to the UN Committee
on the Elimination of Racial Discrimination and
the Inter-American Court of Human Rights show
how, contrary to the obligations of countries
under international law, the rights to forest
people’s lands are routinely handed over to third
parties without the people’s consent through the
overzealous application of the state’s power
of eminent domain.

The mandates and programs of forest agencies,
generally designed to generate financial revenues
to government through commercial harvesting
and to establish public protected areas, are often
at odds with the human, civil and political rights
of local people specified in national constitutions
and land laws. They also often contradict the
requirements of Article 10(c) of the Convention on
Biological Diversity, which requires governments
to protect the customary use of biological resources
and to encourage measures compatible with
conservation and sustainable use. Basic problems
of governance compound the problems of forest
communities. Whereas international law recognizes
that victims of human rights abuses have a right
to redress, in practice many forest people find
they are denied access to justice and the protection
that should be afforded by the rule of law. The
inevitable result is that rural communities and
indigenous peoples are too often forced into
extra-legal means of surviving and asserting
their rights, leading to conflict, repression and
further abuse.

Dramatic progress has been made in the fight
against global poverty, but this good news belies
alarming local realities. Many developing countries,
particularly those in Africa, will not meet the MDG
goal of halving poverty by 2015. Although there
has been some success in lowering rates of child
mortality, increasing rates of primary education,
and providing access to safe drinking water, many
countries will fall short of the MDG goals pertaining
to these, too. Huge inequalities of income
within and among countries will continue for the
foreseeable future: globally, the average person
in the top ten percentile of wealth is nearly 3,000
times wealthier than the average person in the
bottom ten percentile. The problem is summed
up by Nobel Prize winner Amartya Sen: “Even
though the world is incomparably richer than
ever before, ours is also a world of extraordinary
depth, deprivation and staggering inequality.”

Poverty is disproportionately prevalent
in dense forest areas and is often particularly
severe and long-lasting there. Many of the world’s
indigenous and ethnic minority communities
inhabit forest areas: 84% of India’s tribal and
ethnic minorities, for example, live in forest
areas. Analysts of rural-urban poverty dynamics
have found high spatial disparities in the incidence
of poverty between forested and non-forested
areas, particularly in Africa and indigenous (forested)
regions of Latin America but also in high-growth
countries like India and China.

Poverty rates are high in forest areas for
a number of reasons. Insecure property rights
over forest lands and resources, and regulatory
frameworks that prevent or discourage customary
owners from benefiting from their assets, are two.
In addition, forest communities tend to lack
political power and, often, the means to stand
up to outside interests who wish to exploit their
land. Similarly, the poorest in many communities
are unable to protect their interests against village
elites, who can take advantage of insecure
customary regimes to privatize commonly held
resources and otherwise capture benefits. The
rate of government investment in infrastructure
and public services such as schools and health
care is generally low in remote rural areas.

Nor is investment in agriculture matched by
investment in forest areas. This creates a double
disadvantage for the forest poor, who must cope
with a lack of roads, education and other social
services as well as a lack of land ownership. Forest areas often act as a magnet for migrants, many of whom are poor.

Finally, growing populations in rural areas across the developing world increase the scale of many of these challenges. According to the World Development Report 2008, the size of these rural populations will grow until 2020, with South Asia declining only after 2025 and Africa after 2030 at the earliest. This will force declines in average farm size and increases in landlessness and thereby increase pressure on forests and the customary regimes that protect them.

### CONTESTATION AND CONFLICT

The fact that, by and large, governments have failed to recognize and clarify property and other human and civil rights in forest areas, and the fact that rural people and forest communities are usually very poor, give rise to substantial resentment and disagreement and frequently to conflict. Weak governance systems for mediating disputes, and increasing resource scarcity, exacerbate tensions—within communities, between communities, between communities and governments, and between communities and private-sector actors. Such conflicts are often manifestations of discrepancies between customary land and governance systems, which remain dominant in forest areas, and the formal government systems that have asserted claims and allocated rights but are unable to fully exercise control. In many ways, the often low-level but persistent contestation that plagues rural and particularly remote areas—unsettled disagreements, and the abusive use of power to take advantage of ongoing institutional uncertainties and vacuums—are the most pervasive constraints to social and economic progress in rural areas.

Grievances over the allocation of natural resources frequently lead to violent conflicts, many of which have their roots in the colonial and post-colonial appropriation of land from local communities. At the time of writing (mid 2008), at least 71 violent conflicts were underway worldwide, around two-thirds of which were driven by contested land rights claims. Table 1 shows that these conflicts frequently occur in forests. Between 1990 and 2004, armed conflicts took place in almost 9% of the world’s dense, mainly tropical, forest; in Africa, over one-half of the continent’s forests, and 52 million people, were affected.

Forests frequently provide shelter for belligerent groups. During the 1980s and 1990s, for example, rebel groups like the Khmer Rouge in Cambodia and the Revolutionary United Front in Sierra Leone used forests as a place to hide. Forest areas have also provided groups involved in armed conflict with natural resources such as timber and diamonds with which to fund their activities, such as in the recent civil wars in Liberia and the ongoing conflicts in eastern portions of the Democratic Republic of the Congo (DRC).

According to the 2005 Human Security Report, the overall level of violent conflict, both internal and international, fell during the period 1992–2003. This measure does not show, however, that the incidence of human rights abuses remained the same during the period; there are numerous indications that the overall level of contestation is increasing rather than declining. According to Alden Wily, many of the more recent conflicts have their origins in the past subordination of customary ownership and the longstanding territorial disputes that this engendered.

### TABLE 1. INCREASING UNREST: FORESTS IN CONFLICT ZONES, 1990-2004

<table>
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<tr>
<th>Continent</th>
<th>Forest threatened (million hectares, (%))</th>
<th>Population threatened (millions of people)</th>
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<tbody>
<tr>
<td>Africa</td>
<td>130.0 (53)</td>
<td>52</td>
</tr>
<tr>
<td>Latin America</td>
<td>50.4 (21)</td>
<td>13</td>
</tr>
<tr>
<td>South/Southeast Asia</td>
<td>52.1 (22)</td>
<td>63</td>
</tr>
<tr>
<td>Europe/Central Asia/North America</td>
<td>10.4 (4)</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>242.9</strong></td>
<td><strong>127</strong></td>
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</tbody>
</table>

*Source: de Koning, Ruben, Yurdi Yasmi and Doris Capistrano. 2007. Forest Conflict and Tenure. Center for International Forestry Research and RRI.*
“At the stroke of a pen, several billion people around the colonized world on four continents were rendered tenants of the state, with varying degrees of protection as mere occupants and users—not owners. Despite reforms, most remain so today....”

—Liz Alden Wily, Independent Tenure Expert

deforestation and degradation—through the conversion of land to agriculture by settlers or agribusinesses, for example—is increasing the risk of both human rights abuses and violent conflict. Continued poverty and population growth and increased competition for scarce resources all signal that unless robust, pre-emptive tenure reforms are made there will be more rather than fewer violent conflicts in coming decades.37

SLOW ECONOMIC GROWTH AND CONCENTRATED WEALTH

Economic growth in the forest-rich developing countries lags significantly behind that in countries with less forest cover.38 In 58 countries that are “falling behind and falling apart”, an estimated one billion people—one-sixth of the world’s population—are living and dying in extreme poverty.39 Half of these “bottom billion” countries are forest-rich, yet their per capita income is less now than it was in 1970. Between 1974 and 2005, average annual growth in gross domestic product (GDP) in forest-rich countries in Africa was 2.1%, compared with 3.5% in forest-poor countries. Comparing these countries on a per capita basis—from a political and development perspective the more important measure—the difference is still statistically significant and is in fact -0.06% in the forest-rich countries and 0.09% in the forest-poor countries.40

Conventional wisdom among development economists is that forest-rich countries often get caught in a resource-dependence trap, the ‘resource curse’ under which they become reliant on exports of primary commodities, which in turn reinforces low economic growth, poor governance and poverty.41 Some resource-rich countries, such as Sweden, Australia and, arguably, Botswana and China, have escaped the trap by channeling wealth from resources into manufacturing capacity, skill building and education, and by diversifying exports.42 But even some resource-rich developing countries that are making good economic progress—China and India being the most obvious examples—are cleaved in two, with rural areas falling far behind urban and coastal areas in their economic development.43 The story is repeated in Latin America, particularly for indigenous peoples.44

Developing countries that have export-oriented, industrialized models of forest development often perform worse than other forest-rich countries on measures of governance as well as economic growth. Twenty-seven of the 33 countries that are producer members of the International Tropical Timber Organization are more prone to political instability than non-members with similar levels of income. According to a World Bank rating system on governance, 24 of these 33 countries have a lower respect for the rule of law and a higher level of corruption than forest-poor countries within the same income range.45

Global market shifts are also changing the economic competitiveness of low-income tropical countries, diminishing the role played by the formal forestry sector in economic growth. Data from West and Central Africa suggest a shift there towards lesser processing capacity, particularly for exports,46 an indication of an increasingly uncompetitive industry. In parallel, there has been a marked shift towards greater exports of raw logs and sawn timber, driven largely by demand from China, which has become the world’s largest wood workshop.47

Using data spanning the last three decades, economists have begun to unravel the development trajectories and experiences of nations. In recent studies, Easterly and Collier both found that: the
inequitable distribution of land, resources and benefits leads to conflict; low income and slow growth increase the chance of civil war; and dependence on the export of primary commodities increases the chance of conflict. Wars and military coups prevent low-income countries from growing and diversifying and therefore keep them dependent on exports of primary commodities. Collier, in particular, found that natural resource wealth has generally not been a catalyst for prosperity at the national level in the “bottom billion” countries. Rent-seeking behavior over natural resources—that is, the making of excessive profits on resource exploitation because the resource is undervalued—is damaging because it encourages corruption and poor governance. Resource rents are often distributed inequitably and frequently fuel ethnic rivalries.

“Countries with more equitable initial land distribution achieved economic growth rates two to three times greater than those in which land distribution was less equitable.”

—Klaus Deininger, World Bank

Other research illustrates how, compared with diffuse production models such as small-scale agriculture and enterprises, point-source production systems (business models in which resources such as oil, minerals, plantation crops and timber in natural forests are produced or extracted from a narrow geographic or economic base) lead to lower and more concentrated growth. In sum, recent economic development research suggests that natural resources can lead to sustained economic growth when there is a shift from the export of commodities to higher valued products, production systems are diffuse rather than concentrated, and exports are diversified over time. It also matters how governments spend the revenues they earn. Research by the World Bank in Latin America found that the key was combining natural resource extraction and export policies with investments in human capital, knowledge systems, public infrastructure and good institutions. “In other words, it is not what countries produce, but how.”

The shape of a country’s forest industry, and whether or not it contributes to widely-shared growth and good governance, reflects the distribution of resource rights. Forest-based economic growth is favored by smaller scale in forest enterprises, which in turn is made possible by forest tenure reform. Recent research on tenure by Deininger at the World Bank, and by others, makes a strong case for strengthening land rights as a direct and powerful stimulus to economic growth. Deininger’s analysis of growth in 73 countries in the period 1960 to 2000 found that countries with more equitable initial land distribution achieved growth rates two to three times greater than those in which land distribution was less equitable. He concluded that secure property rights give landholders the confidence and motivation to make investments, enable landholders to obtain loans by using land titles as collateral, and encourage external investment.

Moreover, secure land tenure can help address four challenges related to economic growth: 1) it promotes faster economic growth (which accelerates when tenure is secure); 2) it reduces inequality (growth is more beneficial when people have fair access to land); 3) it promotes sustainability (secure tenure motivates landholders to take a long-term view of resource management); and 4) it enhances mobility (landholders with secure tenure are able to rent land to others and to seek more gainful income elsewhere). In short, increasing forest-based productivity, and thus economic growth, requires a much more equitable distribution of assets and opportunity than is currently the case in most forested developing countries.
1.2 HISTORICAL PERSPECTIVES: BETWEEN ABUSE, NEGLECT AND POSSIBILITY

The problems facing many forest-rich countries today are not new or unique. Reviews of European and North American history point to transitions there from the local management of forest areas as commons to the control and exploitation of forest areas by central powers and accompanying conflicts with local peoples. The current forest tenure and policy framework in the United States, established at the turn of the 20th century, was preceded by a long period of war and aggression between the colonizers and the indigenous communities and the eventual displacement of remnant populations of indigenous people to reserves on largely degraded lands. Today, American Indians are among the poorest of the rural poor in the United States, as well as in Mexico and Canada.

The governance of forest areas in Europe has also changed dramatically over the centuries, from well-recognized commons, to feudal claims and the control of forest lands by royalty and regional elites, to more democratic models of management and ownership. This latter change is instructive. After years of protest, conflict and eventual reform, most forest lands in Europe are now owned by households and communities, who enjoy the benefits of human, civil and political rights (a similar transition is under way in some countries in Eastern Europe). As these rights became recognized, democratic institutions were able to emerge and rural economies began to develop and flourish. Healthy European forest economies have arisen not from central planning or development agency strategy, but from the recognition of rights, the enabling of democratic processes, and policies that are supportive of smallholders and community forest owners.

Colonial powers imposed centralized systems of forest governance in many of their colonies. These systems continued after decolonization and some newly independent countries went even further in nationalizing forest lands and resources. Nevertheless, land redistribution has taken place in some countries. In the 20th century, Mexico and China both underwent major reforms to redistribute forest land to peasants and indigenous peoples.

Concerned with the threats posed to national security by entrenched rural poverty and growing inequity, China is going even further now, recently launching major new rural development policies and investments, including reforms in forest policy which strengthen collective and household property rights. India is also responding to the national costs of political disenfranchisement and poverty in forest areas. In 2005, the country’s Prime Minister, Manmohan Singh, described the rebellion of ethnic groups in forested areas as the single largest threat to national security in India. After more than 10 years of deliberation, in late 2006 the national parliament there passed a bill to recognize and strengthen the property and forest-access rights of rural and tribal peoples.
of the United Nations, was convinced that forestry could make a significant contribution to development and he and colleagues persuaded the World Bank and other organizations to help finance largescale forest industries. This assistance promoted an industry based on industrial-scale forest concessions and the export of logs and lumber.62

By the early 1960s, most development institutions had active forestry portfolios, and loans were available to countries in Africa, Asia and Latin America for the construction of sawmills, pulp mills and other major industries. Most governments persisted with the economic production models established during the colonial period, maintaining control over forest lands and allocating them to commercial concessions.63 Natural assets were converted to hard currency, which, it was hoped, would fuel economic growth.64

Today, this model is well established in national policy and legal frameworks and continues to receive support from international financial institutions. In Central Africa alone, approximately 50 million hectares of forest are in industrial concessions.65

In 2004 the tropical forest industry was worth

“There are comprehensive ambitions of the planners have misfired badly, crowding out more sensible and pragmatic approaches that are humble about their own limitations. The World’s poor will mostly determine their own fate by their own home-grown institutions and initiatives, as much historical and empirical evidence suggests.”
—William Easterly, Reinventing Foreign Aid

2

ATTEMPTS AT DEVELOPMENT: OLD MODELS AND NEW DIRECTIONS

2.1 APPROACHES ADVANCED BY THE INTERNATIONAL COMMUNITY

There have been dramatic shifts in development models since forestry assistance began in the early 1950s. Forestry has always played a minor role in the overall official development assistance (ODA) portfolio; more important than actual levels of investment, though, is the legitimacy that development assistance can provide to government initiatives. Development support has clearly helped many of the rural poor to organize themselves and become politically more powerful and, in many cases, to improve their incomes; instances of this can be found, for example, in Mexico and Nepal.61

What follows is a simplified historical overview of the most common pattern of development attempts in forest areas.

EXPORT-ORIENTED, FOREST-BASED INDUSTRY

As developing countries emerged from colonialism, governments were keen to establish home-grown industries, believing them to be fundamental building blocks of economic growth and trade. Jack Westoby, one of the first international foresters with the Food and Agriculture Organization of the United Nations, was convinced that forestry could make a significant contribution to development and he and colleagues persuaded the World Bank and other organizations to help finance largescale forest industries. This assistance promoted an industry based on industrial-scale forest concessions and the export of logs and lumber.62

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In 2004 the tropical forest industry was worth
US$140 billion annually and generated US$9 billion in the trade of primary commodities.66

Recent research by the Rainforest Foundation and Forests Monitor on the impact of industrial concessions in the Congo Basin found a lack of development due to corruption at all levels, limited local employment generation, limited value addition, and negative impacts on human health.67 A review of the export industry in Papua New Guinea, based on the government’s own reports, found human rights abuses, minimal positive impacts on local communities, and widespread illegality and corruption, in addition to unsustainable logging.68 Industrial concessions in Indonesia, all on forest land claimed by indigenous people, have similar records of abuse and corruption.69 Some industrial concession owners have begun to collaborate with environmental non-governmental organizations (NGOs) and to recognize the user rights of local people. But not only are these examples small islands in a vast sea of indifference, they mostly exist despite social and political tensions caused by unaddressed human rights claims and property claims on the concessions by indigenous and other forest communities.

In DRC and Cambodia, two countries that have emerged recently from civil war, the donor community, led by the World Bank, actively promoted the reinstatement of the industrial concession model, albeit with significant modifications regarding environmental performance, with the aims of spurring economic growth, providing infrastructure and investment in remote areas, and increasing government revenues. But these initiatives were undertaken without adequate attention to the underlying issue of land rights and justified on the basis of ambitious assumptions regarding economic benefits. Inevitably, they created a set of governance problems by fostering ‘states within a state’ and were ultimately judged to have run afoul of the donor community’s own international social standards.70 More recently, the donor community has been promoting a cautious but similar approach in Liberia—with a similar lack of understanding of the effects such a model will have on the local rights and aspirations of local people and with similar overestimations regarding government revenues.71

The historical record shows that, in many tropical countries, a very small share of the taxes paid by industrial concessions benefits the communities in which the timber is harvested, although there have been important attempts to remedy this. In Cameroon, a country often promoted as a beacon of forestry reform in Central Africa, the recovery of forest fees and taxes rose by over 90% between 1994 and 2002, from about US$14 million to 560 million, as a result of reforms there. Over the same period, revenues to local governing bodies rose from nearly zero to US$20 million a year. Problems remain, however, in getting revenues through to local communities: just 2% of forestry royalties are reaching the village level, even though the government has introduced arrangements to return 50% of the main timber tax to local governments to be spent in the districts and villages.72 In addition to the limited distribution of benefits, the concession system tends to concentrate wealth in the hands of a relatively small number of companies, increasing the chances of rent-seeking and corruption: in DRC, for example, just 12 firms were approved recently to bid on concessions covering over 30 million hectares.73

As a complement to industrial concessions (and in some countries as a response to deforestation and forest degradation), large-scale plantations have also been promoted, initially on state-owned forest land and then increasingly in marginal or crop land. Although, worldwide, subsidies for plantation development are relatively small—around US$2 billion per year compared with US$400 billion a year for agriculture—they far exceed ODA in the forestry sector.74 Subsidies include both direct incentives to defray establishment or opportunity costs, and indirect subsidies in the form of roads, tax and tariff reductions, and energy subsidies to processors. Arguably, these subsidies to the plantation industry undermine the economic viability of natural forest management and the small-scale enterprises that depend on it, further
weakening incentives to manage natural forests and the potential for natural forests to contribute to social and economic development.76

Despite being an early proponent of industrial concessions, by the mid 1970s Westoby had become one of their greatest critics. He realized that export-oriented, industrial forestry was damaging communities and local economies, and that governments were failing to invest in forest management and to share the benefits fairly. “Forest industries have made little or no contribution to socio-economic development in the underdeveloped world,” he wrote. “Indeed, the probability is that such industries... served but to deflect attention from real needs.” 77 He urged the international forestry community to refocus on human, civil and political rights.

“A high proportion of the humid tropical forest areas which survive today is found in countries ruled by regimes which are both economically inequitable and authoritarian... These are regimes which today are actively engaged in, or are turning a blind eye towards, the genocide of forest-dwelling peoples, ... waging war against peasant organizations, and local clergy who come to the defence of the poor.” 78

The 1972 Stockholm conference, followed in 1978 by the World Forestry Conference and then, in 1992 by the Rio Earth Summit, stimulated global moves towards more balanced models of development that incorporated concepts such as environmental protection, sustainability, and respect for human and civil rights and equality. The widespread but problematic creation of protected areas has been complemented by efforts to promote greater local participation in forestry (broadly labeled social forestry), sustainable forest management (SFM), the voluntary certification of forest areas, and payments for ecosystem services (PES). Each of these is discussed below.

ENVIRONMENTAL PROTECTION

Environmentalists from the North frequently neglect to acknowledge that the people-less protected area conservation model emerged in the United States after several hundred years of ethnic cleansing and decades of war against the native people of the American West. This model has since been exported around the world, with the issue of ‘protection refugees’ still relatively invisible in popular and donor dialogues. The number and size of protected areas in the World Database on Protected Areas (WDPA)79 have both grown more than tenfold since 1962, to over 100,000 sites covering 1.96 billion hectares; this is 11.6% of the world’s terrestrial surface and some 10–12% of the world’s forest ecosystems.80 Central and South America have the highest percentages of land under protection (more than 25% each if indigenous reserves are included), compared with 12% in Europe and 10% in West and Central Africa. Public protected areas present fewer social and political challenges in Europe and the Americas than in other parts of the world because the vast majority of citizens in those countries now reside in urban areas and relatively small portions of their populations are directly affected by environmental displacement and regulatory constraints on their property rights.

The protected-area model depends on a level of financing that is available only in developed countries: the United States and countries of the European Union (EU), for example, allocate more than US$1,000 per hectare annually, while developing countries average US$1–10. That shortfall will not be made up by international agencies or private foundations, the combined contributions of which are in decline.81 Bilateral and multilateral aid for conservation is considerably less now than it was in the early 1990s; conservationists estimate that, overall, there is an annual shortfall of US$27–30 billion in the funds needed to safeguard protected areas.

The protected-area model was implemented with the worthy intention of conserving biodiversity but in application it generally failed to recognize the rights or even existence of local people, constituting, at its worst, a direct land grab.82

The Global Environment Facility (GEF) and other conservation funders have virtually no reliable information on the status of tenure and property rights in the 100,000 protected areas listed in the WDPA or on the extent to which the tenure of those lands is disputed. An undefined number of these
100,000 sites are actually community conservation initiatives or indigenous territories “defined” for conservation purposes as “protected areas”. This definition can be a source of empowerment or a source of disempowerment, depending upon the objectives of those using the WDPA figures. One-third of the 68,000 protected areas in the International Union for Conservation of Nature (IUCN) classification system used in creating the WDPA are in the three categories that most restrict human activity, and most of these are in developing countries, where population and resource pressures are greatest.\(^{83}\)

Conservation models have evolved over the past 30 years and conservationists are paying increased attention to the protection of biodiversity and ecological values in the broader landscape. Though public protected areas remain a dominant approach in developing countries, some organizations are recognizing the legitimacy of community-driven conservation efforts. Scientists are rethinking conservation management criteria and minimum ecosystem size requirements, and are learning from traditional community conservation experiences.\(^{86}\) They are also gaining a new understanding of the role that existing human-nature relationships often play in maintaining biodiversity and ecological processes. Increasingly, indigenous peoples and traditional rights are being recognized within specific public protected areas, boundaries are being redrawn, and there is broad experimentation with ecological corridors and transboundary management.

Many conservation efforts are using innovative and rights-based approaches. Kaa Iya National Park in Bolivia, for example, is now managed jointly by the indigenous peoples’ government, the national parks authority, and an American NGO, using a trust fund endowed by proceeds from a gas pipeline which crosses the park.\(^{85}\) Mexico’s National Forest Commission understands that local people must benefit from conservation, stating on its website: “the management and rational exploitation of the forests has to come hand in hand with just distribution of their riches among the forest stewards and with biodiversity conservation.”\(^{96}\) IUCN, progressive governments and some conservation organizations have shifted towards policies that begin with a respect for human and property rights and support livelihoods, multiple uses, and planning at a landscape scale.

Sadly, this is not universally the case. The big three conservation agencies (The Nature Conservancy, Conservation International and the World Wildlife Fund) easily spend more than the GEF on conservation initiatives in developing countries—around US$480 million a year—and have recently adopted policies on indigenous peoples but, in the main, their protection mission and allegiance to conventional protection models continue to trump local human and property rights. Nor do they have clear standards relating to traditional but non-indigenous peoples, free, prior and informed consent, or resettlement (including restitution or past land grabs in programs to improve conservation in existing areas).

The high social and environmental standards set by the World Bank and the GEF are outdated in their approaches to human rights agendas; for example, their procedures and instruments for ensuring environmental protection eclipse human rights—including tenure and property rights and rights to just regulations and due process. Funding for public conservation initiatives continues to be tight, and new mechanisms like PES will not quickly take up the slack. Nor is any conservation organization even considering committing funds to compensate conservation refugees—globally estimated to number 130 million people, including 14 million in Africa.\(^{87}\) If everyone currently living illegally in protected areas or using protected-area resources were to be evicted or have their resource access restricted, hundreds of millions of people could potentially be negatively affected.\(^{88}\)

The new urgency for putting key biodiversity areas under some form of protection in the face of climate change risks fueling a new green land grab. The international development community and high-profile conservation agencies have set targets of 50 million hectares for new protected areas and the consolidation of conservation in 200 million hectares of existing protected areas, all with inadequate analysis of rights issues and a poor understanding of the human-nature relationships that could be sustained by different ownership and management models.\(^{39}\)
SOCIAL AND PARTICIPATORY FORESTRY

In recognition that industrial development and environmental protection were providing few benefits for the poor and that forest degradation remained a serious problem, in the 1970s some international donors, NGOs and governments started to promote what was dubbed social forestry. The term referred to a range of activities that promoted the greater involvement of people in the management of community forests, the restoration of forests in and around agricultural landscapes and along roads, waterways and railways, and tree-planting in forest margins. Except in a limited number of forests in which customary rights were clearly recognized, social forestry was initially only considered suitable where the forest resource had already become severely degraded.

Social forestry gained momentum in the 1980s amid increasing concern about rural poverty and continued fears surrounding the rural fuel crisis. It complemented the protected-area model, which largely excluded people, by aiming to improve tree resources in the broader landscape and to restore resources important for local livelihoods, environmental services, and, increasingly as the model evolved, local incomes. In general, it had a strong technocratic focus and was implemented at many scales—from interventions by small NGOs, to multilateral projects in South and East Asia involving millions of hectares.

Early projects were often driven by government agency targets and bureaucratic processes, with limited tailoring to local needs, conditions or political realities. As deeper engagement with local people began to reveal the complexity of land and forest rights in the broader landscape, and as foresters started to realize that vast numbers of rural people still lived in and around and claimed rights to natural forests, social forestry expanded to include forest areas previously owned or managed by governments.

In a number of countries, the forest industry realized that socially managed plantations and natural forests could supply it with timber and wood products, obviating the need to own land or lease it from the state.

As social forestry expanded it adopted various guises in the form of co-management arrangements (e.g. participatory forestry, joint forest management, and community forestry) and programs started to pay greater attention to local power and governance structures. On balance, however, little effort was invested in tackling fundamental issues of contested tenure and forest dweller rights. Few countries were willing to consider the possibility that the most valuable forests could be shifted outside the public domain.

Several lessons can be drawn from the three-decade experiment with social, community and participatory forestry. First, in almost all cases it proved nearly impossible for these investments to re-orient forest agencies to a more people-friendly approach. Nor did it lead to fundamental reforms of forest policy and property, even when social consensus was moving in that direction. Large-scale projects fell prey to entrenched bureaucratic behaviors, incomplete reforms, and local power battles that impeded goal attainment. Second, attempts to develop local and more organic models outside the government bureaucracy often fell into a ‘pilot model’ trap in which a boutique solution was invented that was unviable elsewhere. Third, interventions were rarely made on the basis of a good understanding of the broader market and policy context, resulting in a situation in which many poor people invested their land and labor in producing trees but were unable to benefit commercially from them. In most cases, the opportunity was missed to scale up local innovations and to modify the subsidies, tax frameworks and forest management and market regulations that were crippling local enterprises.

More recently, participatory protected-area programs and landscape-level forest interventions have tried to act on these lessons, and there has been some movement towards greater recognition of forest rights. In some countries, social forestry programs were able to catalyze substantial policy reforms. In Tanzania, the government has committed to establishing community-based forest management as the basis of all forest development. In Mexico,
the state has reinforced community ownership and begun to provide technical and financial services to communities.

Unfortunately, the many important lessons and experiences from social forestry have not been shared effectively among grass-roots actors to facilitate their learning and innovation. The social forestry agenda propelled joint forest management, which improved local people's access and rights to forests. It did not, however, bring into question the underlying property rights and therefore acted to legitimize and consolidate government intransigence on tenure reform.

**MARKET-BASED CONSERVATION**

In the 1990s a new set of instruments and approaches grounded in market incentives emerged to promote sustainable forestry. These approaches built on the changing environmental regulation paradigm in the industrial and urban environmental sectors, which had switched from an emphasis on command-and-control regulation to ‘smart’, incentives-based regulations and voluntary standards that could be legitimated socially.

One of the most significant instruments to emerge was independent forest certification, a voluntary process by which the planning and implementation of on-the-ground forestry operations are audited by a qualified, independent third party against a pre-determined standard designed to ensure that operations are environmentally sustainable and socially acceptable. Forest certification was designed with the expectation that consumers would pay the additional cost of products from well-managed forests, thereby providing an incentive for producers and retailers to support sustainability. Ironically, industrial forest concessions and commercial plantations in developed and developing countries have been most favored by this development because of their larger scale, and forest certification has expanded disproportionately in temperate regions and in already well-governed countries. Certification has been less successful in the tropics—for which it was first conceived—and particularly in forests managed by communities. Of the 306 million hectares of forest certified worldwide, only 7% are in developing countries, including 5% in the tropics. 32

A number of enabling measures have been tried to expand the scope of certification in the tropics and to smallholders and communities. Governments have established procurement preferences for certified markets to stimulate demand, and modified standards have been developed for low-intensity harvesting and for smallholder groups. To date, however, the impacts of these measures have been marginal, particularly on forests supplying domestic or developing country markets. Moreover, the limited funds available to support community and smallholder forest development are being concentrated on a small number of certifiable producers, inadvertently making it more difficult for the rest to thrive. Forest certification has many benefits but, until now, the costs have been a significant barrier.

Another intervention to foster SFM has been the promotion of payments and markets for diverse ecosystem services such as carbon sequestration, biodiversity conservation and the production of clean water. For several reasons, the ability of PES to serve the forest-dependent poor could eventually be much greater than other conservation measures: forests provide many services that could eventually find markets; there is new interest in avoided deforestation within the UNFCCC; ecosystem service markets could be bundled together to achieve economies of scale; and a broad set of actors is interested in investing in or buying ecosystem services or providing intermediary services. Early successes encourage this view and also provide an important lesson: land management for water quality in New York State, payments to small forest managers in Costa Rica, land-care programs in Australia, and payments to forest communities in Mexico, all operate where property rights to land and ecosystem services are recognized.

The challenges to the expansion of PES remain great, however. Schemes are plagued by many of the same problems that hindered earlier
approaches to forest conservation and management: the narrow interests of private-sector buyers and investors; the limited capacity of institutions to establish and apply the rules; a lack of demand in remote areas with poor governance; and the limited voice of the poor and of indigenous and traditional peoples in setting the rules and designing the instruments. Markets for carbon will inevitably seek the most competitive price with the lowest transaction costs and therefore will almost certainly favor larger-scale projects, such as industrial plantations, in places where tenure is secure and governance sound. Water and biodiversity conservation services are more spatially limited and site-specific and have a high potential for bundling (water services with wetland biodiversity conservation, for example). Without concerted and well-designed effort, however, the costs involved and the lack of capacity to manage risks will continue to present significant barriers for small producers and communities.

The ability of PES to scale up without undermining the lot of the rural poor will depend on the degree to which markets can be shaped to respect local rights and governance systems. 

Going further and actually contributing to local wellbeing requires equitable platforms and institutions to underpin negotiations, the recognition of community land rights, and a broader appreciation of local knowledge and customary management systems.

2.2 EMERGING LESSONS: FROM IMPOSING AND PLANNING TO RESPECTING AND SUPPORTING

The development models described above now co-exist and in many cases blend together, each having been favored by governments or international actors for varying periods and amended and integrated over time. While these models and interventions have clearly brought gains to many forest areas, at the same time they have often entrenched institutional, political and market structures that keep rural people poor and forest areas insecure.

This vast experience, over time and in differing social and political settings, generates a host of findings and lessons. Achieving development in remote areas is not easy. The underlying constraints are political, and the politics of control and the concentration of wealth is not easily changed. Nevertheless, many examples exist of external interventions that have influenced domestic policies—from direct approaches such as participatory land mapping and facilitating legal action, to more indirect and strategic approaches such as support for local research and organizations. These help build local capacity for more informed dialogue and open more political space for local voices.

Many governments are increasingly open to strategic advice—not prescriptions—and information regarding how other governments are dealing with contentious tenure and policy reform issues. There is increasing appreciation of the need to fix the underlying institutional structures of development, including property rights, governance and trade, and to set in place more equitable processes to govern these structures. A growing number of aid agents and local advocates have the capacity, proven approaches and tools to help put these reforms into place.

At the same time, it seems that hubris has often trumped humility in the development assistance agenda. External agents, convinced of their own cleverness and capacity, assume that they can ‘get it right this time’. The planner, imposing models, has been more prevalent than the seeker, facilitating the discovery of solutions. On this score, donors have not necessarily been any better than developing country governments and, despite a self-established moral high ground, civil society has not necessarily outperformed governments. And the private sector, although frequently seen as the ‘baddest’ actor of them all, has not necessarily been worse than anyone else.
Overall, there has been a tendency for governments and donors to careen from one crisis to the next, or from one ‘ideal’ solution to the next, rarely mustering the political will or organizational capacity to address the underlying institutional problems that led to underdevelopment in the first place. Indeed, this political pendulum is difficult to avoid in developed and developing countries alike, and there is a good deal of evidence that fundamental reforms only come after massive shocks such as war or environmental, political or economic catastrophe. In this sense, political stability is a double-edged sword, both enabling societies to address politically contentious constraints, and permitting the squelching and repression of local creative energies and dissent.

“The progress of technological skill makes it rational and indeed imperative to plan, and anxiety for the success of a particular planned society naturally inclines the planners to seek insulation from incalculable forces which may jeopardize the plan....and this policy leads to repression of the discontented...So the remedy grows to be worse than the disease…”

—Isaiah Berlin, Liberty

The longstanding presumption that public ownership or control of forest areas was necessary because forests generated public goods (such as biodiversity conservation, adequate timber supplies, and watershed protection) has been overturned. Private and community-owned lands provide public goods that are valuable at the local, regional and global levels. It is increasingly evident that, from a public goods perspective, it matters less who owns the forest than the incentives on offer to the owner and the security of that owner’s tenure. In the United States, Mexico and Europe, there has been dramatic growth in policies and programs to facilitate private conservation. In Australia, governments have restored ownership of many public protected areas to the traditional indigenous landowners and then leased those lands back to manage as national parks. In the UK, there are no public protected areas but, rather, there is a system of incentives and regulations where rights and responsibilities are negotiated with property owners. The revelation that public ownership is not a prerequisite for conservation provides opportunities to devise tenure systems that both respect community land rights and deliver public goods.

Past development assistance has also shown that trying to plan and organize optimal social and economic development structures from outside a target group is not only morally wrong but also ineffective. Attempting to predict the optimal development structures for future generations is, therefore, also highly problematic. Rather than promoting and imposing social and economic development models, local people must be enabled to identify and negotiate their options, and to become flexible and resilient in coping with unexpected change. This shift in approach has
New bases for equitable governance and development in forest areas require a sound institutional foundation and recognition of local land, civic and political rights as a foundation for social, political and ecological resilience. There are numerous combinations of arrangements that can establish a robust forest-based industry, foster forest livelihoods and wellbeing, and protect species and natural systems. Unquestionably, these will not be static arrangements but will continue to evolve and shift over time.

A fundamental mistake of the planned forest economy has been the codification of particular land and forest uses aimed at optimizing specific goals and providing sustained investment in forests by the private sector. Parks and concession areas have been created independently of customary tenure systems and the goals and aspirations of local people. When a desired use is identified, the forest is zoned from above.

Economic development in agricultural areas has proceeded most rapidly when land rights have been clarified and overregulation removed and when the state ceased its control of industry and its habit of trying to ‘pick winners’. Indeed, this lesson has been the starting point for dynamic national-level economic growth in many countries, including China. This same process of modernization must be encouraged in forest areas. The success of the outgrower model of smallholder tree planting in supplying industrial demand demonstrates that the private sector can build a competitive niche using a rights-based approach and adapt to changing actors and a changing supply base. The multiple models of community conservation demonstrate that public protected areas are not the only or necessarily the optimal model of protecting nature. As is the case for agricultural lands, there will be overlaps of property rights and zoning or government regulations around water use, resource conservation, taxes and subsidies, but clear and secure rights must be the foundation.

New bases for equitable governance and development in forest areas

2.3 INCREASING RECOGNITION OF LAND RIGHTS AND THE INSTITUTIONS TO SECURE THEM

Democratic openings, transparency and a freer press are beginning to take root in countries where they were unthinkable only a few years ago. Some governments are agreeing to shift land out of the public domain, or are recognizing the customary land rights of communities and increasing access and management rights to lands that remain claimed by governments. A study by Forest Trends found that the amount of forestland officially recognized as owned or administered by communities roughly doubled between 1985 and 2000, to about 22% of all developing country forests. A recent update of this study found that the shift in land ownership and administration is continuing; the amount of forest officially claimed by governments declined by about 7% between 2002 and 2008 and the amount of forest land recognized as privately owned by communities and the amount of public land designated for community use both increased. In 2008, communities, including indigenous peoples, legally owned at least 350 million hectares of forests and had rights to use forests in another 80 million hectares of public forest,
mostly in developing countries. The amount of forest land legally owned by individuals and firms also continued to increase.

The change from public to community and household ownership or usage rights is happening in many countries, both forest-rich and forest-poor, worldwide. Twelve of the 30 most-forested countries have passed legislation since 2000 that, to varying degrees, strengthen community rights to forest lands. In the West African countries of Burkina Faso, Chad, the Gambia and Niger, for example, almost two million hectares of forest land officially devolved to community administration between 2002 and 2008. On the other hand, of these countries only in the Gambia is full community ownership formally recognized. The total amount of forest land allocated by governments to industrial concessions continues to exceed the total amount of forest recognized as officially owned or used by forest communities. In 15 of the 30 most-forested countries, the total forest area under industrial concessions exceeded the areas owned or administered by communities by more than 250 million hectares.

“The dilemma is logically insoluble: we cannot sacrifice either freedom or the organization needed for its defence, or a minimum standard of welfare. The way out must therefore lie in some logically untidy, flexible and even ambiguous compromise.”

—Isaiah Berlin, Liberty

Most of the changes taking place in the 30 most-forested countries in favor of rural and indigenous communities are in Latin America, particularly Brazil. The least amount of progress is being made in Central Africa and Insular Asia.

While, overall, some progress is being made on the statutory recognition of customary land rights and a clarification of forest tenure, this progress in law is often not reflected in practice. Even where indigenous and traditional land and property rights are recognized, their ownership rarely has the same level of protection as other private property. In addition, in areas designated by governments to community use, rights are usually either severely curtailed or come with a host of responsibilities — a step that essentially passes off the responsibility of managing a forest from government to communities without conferring commensurate benefits. The continued preference of governments for industrial concessions and indifference towards community claims, the provision of only limited access rights to communities, the tight regulation of resource use, the low capacity of governments to implement proposed programs to demarcate lands, and the limited enforcement of those legal mechanisms that do exist, all sum to a vast project of unfinished business in forest tenure reform. The course seems set but there is insufficient wind in the sails for the boat to leave the harbor, much less complete the course.

The lack of recognition of community and indigenous people’s lands as full private property rights — private property held by a group — is deceptively important. Private rights are much more secure because they are less easily controlled or expropriated by governments or more powerful actors. Communities that hold private rights have more leverage when negotiating with governments or outside investors than those communities with long-term access rights to publicly held land. The importance of this distinction is growing quickly with the rise of markets for ecosystem services and schemes to sequester carbon. Communities with private land rights have much stronger claims to the benefits of these potential markets, and much stronger protections against exploitation, than communities that only have access rights to public lands.

A few developing countries have recognized community land as private property. The governments of China, Costa Rica and Mexico, for example, have used clear and strong property rights as the basis for new public payment schemes to compensate communities for the value of the ecosystem services they are providing to the nation. These positive examples help point the way and the
future holds considerable promise—particularly in Central and West Africa, where there is great scope in coming decades for dramatic progress in the recognition of community lands.

In parallel to shifts in statutory tenure, a growing body of research documents the extent and effectiveness of community conservation initiatives in forest areas and agroforestry landscapes by both long-resident traditional and indigenous peoples and new settlers. Research in the developing countries of South, Southeast and East Asia, the Americas and Africa suggests that community conservation is taking place in at least 400 million hectares outside the public protected-area system, overlapping many of the most important biodiversity hotspots. There is also growing evidence that forest communities often take better care of their forest areas and invest more in them than do public land managers, including public conservation agencies. Indigenous timber enterprises in Mexico, for example, invest twice as much in their forest areas as does the Mexican government in adjacent protected areas (US$2 compared to US$1 per hectare per year). Worldwide, forest communities spend an estimated US$2.5 billion or more in cash and labor purely on the conservation of their forest areas—more than double the sum invested by international organizations and equivalent to the budget allocations to protected-area systems of all developing countries combined.

Finally, community organizations across the world are increasingly partnering with national and international NGOs and advocacy groups and applying new technology in their quests for tenure recognition. Community mapping initiatives using global positioning systems (GPSs) and related technologies to overlay geospatial data with information on historical and current ownership and land uses provide a basis for negotiating tenure and land use with governments and other stakeholders. Communities are also reaching out nationally and globally to one another, sharing experiences and bringing common concerns to dialogues on forests and the environment.

**THE EXTENT AND PROMISE OF SMALL-SCALE FOREST ENTERPRISES**

The presence of small and medium-sized forest-based enterprises (SMFEs) in developing countries is large and growing. In many countries, small-scale forestry contributes at least as much to GDP as the formal sector and tends to provide far more jobs for local people—even though it is often proscribed by law. Worldwide, an estimated 30 million of the 47 million jobs in the formal forestry industry are provided by enterprises employing fewer than 20 people. If the informal sector is also considered, SMFEs provide an estimated 140 million jobs. They also contribute an estimated US$130 billion or more to gross added value and US$19 billion to international trade.

Often ignored is the important contribution that SMFEs make to urban employment and their linkages to rural suppliers. In post-conflict countries, for example, where ex-combatants often have difficulty in obtaining land or jobs in their home villages, SMFEs can be important in generating urban as well as rural opportunities. The high rate of employment of ex-soldiers in the pit-sawing industry in Liberia is a case in point. Smaller-scale enterprises are also big employers of women, who are adept at scaling up their own forest activities and organizing in groups. In Cameroon, the small-scale (and informal) forestry sector employs an estimated 100,000 men and women. This compares with the 335,000 jobs provided by the formal forestry sector in all nine West and Central African countries—including Cameroon—combined.

While the conventional wisdom has held that economic growth—and thus poverty reduction—would best be achieved by nurturing large industrial champions that can aggregate technical skills, obtain economies of scale and carve out lucrative export markets, there is growing evidence that, when the aim is widely-shared growth and stronger local governance, SMFEs perform better. There are strong positive correlations between economic growth and the proportion of the economy occupied by SMFEs. An analysis of global data across sectors demonstrates that the share
of exports and GDP commanded by smaller enterprises increases as living standards improve.\textsuperscript{108}

It is also clear that smaller enterprises tend to flourish in countries where household and community rights are fully recognized.\textsuperscript{109} In the United States and the European Union, small landowners supply the majority of timber, and small-scale industrial forest enterprises dominate both in number and their contribution to employment.\textsuperscript{110} In Sweden, for example, land reforms in the early 19th century paved the way for the development of a forest industry based on a supply from smallholders that has played a key role in rural employment and economic growth;\textsuperscript{111} development has arguably been more equitable than it would have been had the land remained in the ownership of the Crown.

SMFEs are often perceived to be less efficient than large operations in terms of labor productivity, although there is research that challenges this notion. They do, however, add more value to a unit of raw material than larger enterprises, which is good for sustainability because it means generating more value while consuming fewer resources. The furniture industry in Indonesia, which is dominated by SMFEs, takes only 3\% of the logs out of the system but delivers 12\% of the total export value, producing three times as much export income as panels and sawnwood per log processed and significantly more than pulp and paper.\textsuperscript{112}

Barriers to the emergence and expansion of SMFEs are substantial in most developing countries because rules are persistently structured around the large-scale industrial model and the protected-area conservation model. Additional barriers exist in Africa: a recent World Bank study suggests that the structure of the forestry industry there actively limits the entry of new businesses and encourages dominant businesses to oppose reforms that would improve the business climate and promote economic growth.\textsuperscript{113} The research also finds that a poor business climate has a relatively small impact on extraction-based and export-oriented companies—such as those holding logging concessions—but a large and often devastating impact on small and medium-scale manufacturing.\textsuperscript{114}

Red tape, corruption and the lack of political access all act as hindrances to the small-scale forestry sector.\textsuperscript{115} SMFEs employ huge numbers of people and make up a large share of many national economies, yet in the face of these barriers they are limited in their ability to improve working, safety and labor conditions, gain greater efficiency in production or market linkages, access working capital, and create formal associations to achieve economies of scale. As a result, significant income and poverty reduction potential is continually being lost.

One solution is the formation of SMFE associations: there is good evidence that such associations can play an important role in solving problems of scale and powerlessness, gaining efficiency in marketing and technical services, and combating drudgery. Associations also make it easier to partner with large industries, giving capital-intensive processors flexibility in supply and the provision of services.\textsuperscript{116}

Encouraging community-based SMFEs would consolidate the protection of high conservation value forest while enabling communities to generate wealth. It would also provide a face-saving way out for those conservation agencies now in the uncomfortable position of implicitly endorsing forced resettlement, extinguishing legitimate land and resource claims, and curtailing traditional livelihoods.\textsuperscript{117}

\textbf{INCREASING COMMUNITY CAPACITY—COMMUNICATION, TRANSPARENCY \AND THE PROMISE OF ACCOUNTABILITY}

Local people are increasingly able to take charge of their own destinies and to hold the rest of the world accountable. Organizations representing indigenous and other local people are not only local or national; since the 1970s, an estimated 20,000 transnational civil-society networks have come into being.\textsuperscript{118}

The rapid expansion of telecommunications, particularly in well-populated developing countries,
is arguably doing more to unlock social, economic and political potential than any prior development intervention.119 In 2006, 80% of the world’s people lived within range of a global telecommunications network and 25% owned a mobile phone.120 Mobile phones, in particular, are dramatically improving communications in remote forest areas. When it reaches rural areas, the new US$100 laptop will give a wider set of actors access to vast information resources and a growing range of media. Mapping information and technology will become increasingly available and accessible, particularly with the advent of lower-cost geographic information systems, GPSs and web-based mapping applications. This greater facility to communicate also facilitates transparent governance.

Transparency and participation are increasingly part of the social license to operate. While these twin concepts were first applied to and adopted by international companies or investors with constituencies in the developed world, they are rapidly becoming global and are beginning to influence investors and actors in middle-income and developing countries.121 Independent certification, the voluntary partnership agreements (VPAs) on the timber trade between Europe and developing country suppliers, and the Extractive Industry Transparency Initiative are all examples of new instruments that increase transparency, enable greater local voice in decisions, and engender greater accountability. Governments will increasingly be held accountable and local communities will find it easier to gain support, join networks and challenge entrenched economic interests. These changes also mean that local communities can increasingly argue their own cases rather than depend on intermediaries; they also mean that development organizations can provide support more directly, rather than relying on NGOs, governments or other intermediaries. These trends are particularly encouraging because they will help communities improve their adaptability, responsiveness and resilience, qualities that will be essential in the future.

Forest areas remain a relative hinterland, still on the receiving end of national and global imperatives. But this is beginning to change and there are great possibilities for the future. Ironically, however, just as the global development community was gaining confidence over its ability to end poverty and establish social and economic development, it has realized that the world has changed. The world we have been learning from, and basing our plans on, is fundamentally different from the world that is coming at us.
A WHOLE NEW WORLD: GLOBAL FORCES AND TRENDS SHAPING THE FUTURE OF FOREST AREAS

“The future always comes too fast, and in the wrong order.”

“The illiterate of the future will not be the person who cannot read. It will be the person who does not know how to learn.”
—Alvin Toffler, Future Shock

Forest landscapes are more affected by the global economy than ever before. In the next few decades, the rising influence of middle-income countries like China and India and the demands of other sectors—food, energy, transport, minerals and tourism—will have enormous influence on the way forest landscapes are used and governed and the poverty or wealth of local people. Moreover, the ecological crises of climate change and water scarcity are likely to shock and shape all rural livelihoods and institutions. Deforestation continues at a rapid pace, the scope and relative authority of forest agencies and forest industries is diminishing, and the forest frontier is being carved up and allocated to other uses. In many countries, tourism is becoming a major force, reaching into forest areas as domestic demand for tourism increases along with economic development. Forest communities and their organizations are fundamentally unprepared for the wave of demand, capital and speculation that is coming at them. Already there are clashes, but there is a high risk of greater collision between local customary institutions and these new forces. Recognizing these trends and their social, political and environmental implications, and reorganizing to diminish their damage and increase their contributions, is a major challenge for advocates of forest peoples and forest ecosystems.

3.1 GROWTH OF THE GLOBAL ECONOMY: BOOMING DEMAND AND A WAVE OF CAPITAL

Global GDP is projected to increase from US$55 trillion currently to US$80 trillion in 2020 and US$150 trillion in 2050. The economies of Brazil, Russia, India and China (the BRIC countries) will become much larger (Figure 1) and will help reshape political influence and business practice. Wealth creation in developing countries, increased consumption and continued population growth will all have a substantial impact on the demand for commodities—and, in turn, will increase pressure on natural forest areas and landscapes. As the economies of the BRIC and other middle-income countries grow, so too will their appetites for energy, agricultural products, water, forest products and other basic commodities. Global demand for food is projected to double by 2020. The production of palm oil will also increase twofold. Demand for meat will increase by 50%,
but the commensurate increase in livestock needed to meet this demand will have a disproportionately large impact on land, forest areas and greenhouse gas emissions because it will both multiply the demand for feedstock, and thus for forest conversion, and increase the production of methane. The number of cattle slaughtered in Brazil’s legal Amazon reached 10 million for the first time in 2007, an increase of 46% over 2004. Prices for other commodities have jumped in recent years, suggesting dramatic increases in demand that are not being matched by supply: since 2001, sugar prices have doubled, the prices of oil, steel and gold have tripled, and copper prices have quintupled.

While the global economy is expected to double in the next three decades, global trade is expected to triple, meaning that commodities of all types will be sourced from all corners of the world. Is there sufficient land to meet this unprecedented increase in demand? A recent study concluded that if the current plateau in productivity continues, the amount of additional agricultural land required just to meet the world’s projected food demand in 2050 would be about 3 billion hectares, nearly all of which would be required in developing countries.

In sum, this booming global demand will create, and is already creating, a wave of capital and speculation, as investors scour the planet for land capable of producing energy, food, minerals and fiber. Since the costs of land and labor are lower in developing countries, and as these landscapes are often more productive than those available in the developed world, much of this pressure is heading to the developing world.

In the last several years, the pressure to develop biofuels and non-food oils has resulted in an explosion of foreign-owned plantations in developing countries. A Chinese company, for example, has committed to investing US$1 billion to establish a 3 million hectare biofuel plantation in DRC. In Tanzania and Mozambique, the Swedish companies Atlas Copco and Sekab have announced plans to develop over 400,000 hectares of land for bioenergy production. A similar project is under way in Ethiopia as the German company, Flora EcoPower, begins investing US$77 million in the Oromia regional state as part of a purchase of over 13,000 hectares of land for biofuel production. In Lao PDR, Stora Enso, the international paper and packaging company, recently commissioned a feasibility study for establishing 35,000 hectares of *Acacia* and *Eucalyptus* plantations in Savannakhet and Salavane provinces. Such large investments indicate that these corners of the world are now valuable places for foreign companies, despite distance and the potential political risks. As a result, rural and forest land prices in many parts of the developing world are increasing dramatically.

![Figure 1. Political and Economic Shifts: Share of Global GDP, 1975, 2005, 2050](image)

3.2 ENERGY SCARCITY AND SPECULATION: BIG CHANGES, BIG POLITICAL PRESSURE

In coming decades, two energy-related shifts will influence forest areas and their development prospects: 1) a massive surge in energy demand—driving new exploration for fossil fuels, much of which will be in forest areas; and 2) the rise of alternative energy sources, including biofuels. These shifts are not only already increasing direct pressure on forest lands but are also leading indirectly to political turbulence and insecurity.

Demand for energy is projected to increase by 50% by 2030; demand for oil alone is expected to grow by 40%. Political concerns about national energy security are driving many governments to expand exploration as well as to investigate and subsidize alternative energy sources. Exploration in forest areas is increasing as more readily accessible supplies decline and as higher prices make expansion into remote areas more feasible. In Peru alone, 45 million hectares of forest land are under contract for oil and gas exploration and exploitation, almost all of which overlaps lands already recognized as being owned by indigenous peoples.

Biofuels, in particular, will directly affect forest areas and are spurring political contention. Over 20 national governments have explicit goals to increase biofuel production over the next decade and many more have set targets for biofuel consumption. These targets have set off a surge of investment and speculation, and significant amounts of capital are flowing into the emerging global biofuels industry. Don Roberts of CIBC Canada calculates that financings in the global biofuels industry rose from roughly US$2.5 billion in 2005 to US$4.7 billion in 2006 and amounted to almost US$2.5 billion in just the first quarter of 2007. Key drivers of this investment are government-mandated minimum renewable fuel content, primarily in the transport sector, and subsidies for biofuel production. Although much of this initial investment was in first-generation biofuels such as corn-based ethanol, it is expected that, because of continued political insecurity and limited options, subsidies and investment will continue for the second generation, including cellulosic ethanol, which is even more amenable than the first to production in forest areas.

The predicted consumption of biofuels by 2030 (Figure 2) is just over 140 million tons of oil equivalent (in the ‘with subsidies’ case), which, in a very conservative estimate, would require an additional 35 million hectares of land. The majority of this demand, and the majority of the expected continued subsidies for biofuels, is in the EU and the United States. Brazil plans to increase its production of ethanol from sugar cane from its current 16 billion liters to 44 billion liters in 2016, using an additional 4.5 million hectares of highly productive land.

China is planning to increase its corn-based ethanol production from 1.5 billion liters now to 3.8 billion liters in 2016, requiring a further 75,000 hectares of high-quality land. The production of palm oil (another potential biofuel) has nearly doubled in tropical regions in less than 10 years and the area of land dedicated to it has grown from 6.5 million hectares to 12 million hectares. There is also

**FIGURE 2. PROJECTED WORLD BIOFUELS CONSUMPTION**
interest in the use of wood as an industrial-scale biofuel. But these projections might already be outdated and overly conservative.

The shift to biofuel production is already influencing prices, both of the commodities (such as corn and sugar) that are used to produce the fuel and of the land on which these commodities might be grown. Conflicts over food began to attract global attention in 2007 when thousands of people in Mexico rioted over the rising price of tortillas, and have escalated in 2008, with major riots over food prices in Haiti and numerous other countries. Governments are responding to the rapidly growing political crisis with a variety of measures, including subsidizing food costs, banning grain exports, and negotiating new trade agreements to secure food imports from producing countries.

In sum, energy scarcity and political efforts to ensure energy security are already putting major pressure on forest areas (as well as agricultural production), and this pressure is likely to increase. Biofuel production could bring major benefits to local communities, but only if their land rights are respected and they have the authority and capacity to negotiate fair contracts.

3.3 THE CHANGING FACE AND NATURE OF FOREST INDUSTRY AND TRADE

Over the next several decades, forest areas will be affected not only by the aforementioned shifts in other sectors, but also by substantial shifts in forest-sector markets, production processes and social expectations regarding the behavior of large industries. These include: the increasing presence and integration of small- and medium-sized producers in national and regional market chains, strong growth in domestic demand for forest products in developing countries (relative to the more mature northern markets); increased supply from industrial plantations and the growing market for cellulosic ethanol and other emerging biofuel technologies; and the growth of certification and corporate social responsibility instruments such as VPAs. Because statistics on production and trade in these divergent markets are poorly integrated, many countries are failing to see the trends and to plan for new pressures on forests and plantation areas and for changing market and employment opportunities.

First, SMFEs are already more important than large-scale industry in production and employment in the United States, Europe, China, India and Brazil. There is strong evidence that the SMFE sector is growing rapidly in both developing and developed countries and that these trends will continue. Private smallholders already provide a majority of wood supply in the United States, Western Europe, China, India and Brazil, and this is expected to grow as property rights are respected and reformed in more countries, both in the North and the South. In addition to the increasing space for SMFEs provided by policy reforms, there is a strong and growing market niche for culturally differentiated wood and non-wood products—including value-added wood products, such as furniture and wood carvings, and medicinals, botanicals and foodstuffs, in both developed and developing markets.

Second, there is a growing divergence between the international commodity wood markets and domestic wood and non-wood markets. Demand for industrial wood fiber will continue to increase; supply is already tight. It is plausible that industrial wood consumption will grow to around 1.85 billion m³ per year by 2020 and to more than 2 billion m³ per year by 2030. Nilsson and Roberts expect that an additional 20–25 million hectares of land will be required for intensive industrial plantations to meet global demand in 2020. According to Nilsson, land prices in Uruguay recently increased threefold.
Finally, expectations that companies will behave in socially responsible, transparent and accountable ways in forest management, processing and trade are fast becoming the norm in developed countries and will be increasingly required of their trading partners in the South. This transition began with independent certification and was picked up by the Forest Law Enforcement and Governance and other transparency initiatives. The mandate of the current generation of VPAs has broadened to examine the questions of legality and governance in a much more comprehensive way and is also opening new political space in which civil-society, private and government actors can deal with longstanding governance problems.

Third, the majority of demand growth will be in domestic markets in developing and middle-income countries. In certain regions of the world (e.g. Africa, India, China and Latin America), fuelwood and charcoal will remain in strong demand. Poor households are often big suppliers (and consumers) of these products, providing them with important sources of income. In less than three years, and there have been similar developments in other tropical countries and in China.\textsuperscript{143} In addition, competition between fast-growing wood for cellulosic ethanol and for pulp, paper and construction uses will increase, all of which will keep prices for wood products high and increase the value of wood resources of all types.

Both social and ecological systems will undergo major adjustments due to climate change. Poor people dependent on forest areas and other natural resources will be exposed and vulnerable to a wide range of changes, including to weather, rainfall, vegetation and the distribution of wild animals. It is now widely accepted that average mean temperatures will increase by at least 1–2°C; according to the Stern Review this could cause the extinction of 15–40% of species and add pressures that would force millions of people into extreme poverty, including (and perhaps particularly) those with limited and insecure rights to their lands, forest areas and other natural assets.\textsuperscript{144} Climate change is already starting to affect some of the poorest and most vulnerable communities around the world.\textsuperscript{145} The interlinked crises of climate change and energy are driving financial flows, land-use allocations, and a new international architecture of institutions, markets and regulations. The possibility of large investments in forests driven by the emerging carbon markets is high. A background note prepared by DFID in 2007 reported that 13 different international funds had already been set up.\textsuperscript{146} Another study estimated that reducing deforestation rates by as little as 10% globally could generate between US$2.2 billion and US$13.5 billion annually in carbon finance.\textsuperscript{147} What these huge potential investments entail for poor, forest-dependent communities is unclear, since “the primary aim of carbon financing is to offset emissions and not guarantee pro-poor development”\textsuperscript{148}

The UNFCCC articulates two approaches for addressing climate change: mitigation, or reducing emissions and increasing carbon sequestration, and adaptation, or adjusting to the changing climate. Forest management will play a key role in both.

Forest management practices tend to be more sustainable when local communities are landowners or at least have clear user rights.\textsuperscript{149} Additionally, forests that are managed in a more sustainable manner are likely to be less vulnerable to climate change.\textsuperscript{150} Thus, vulnerability to climate change can be reduced by the reform of forest tenure and use rights in favor of local communities.

The Stern Review concluded that “major institutional and policy challenges” would have
to be overcome to realize the climate and social benefits of avoided deforestation, including clarifying forest-related property rights, strengthening law enforcement, and overcoming entrenched systems of vested interests. A more recent report by Stern concluded that “Adaptation assistance needs to be integrated into development spending to deliver development goals in a climate resilient manner, rather than being earmarked for climate-specific projects. This will require involvement of organizations and institutions beyond the UNFCCC”. To date, however, there is little evidence that the international discourse is considering institutional and other interventions to ensure that adequate attention is paid to forest tenure and use rights.

Mitigation proposals in relation to forests concentrate on reducing greenhouse gas emissions by reducing deforestation and forest degradation and promoting afforestation. A number of competing schemes (mostly devised by governments, conservation NGOs and the private sector) and funds (mostly promoted by the World Bank and donor governments) are on the table. Adoption of these schemes, backed by the necessary funds, will have a significant impact on how forests are managed in coming decades and on who will manage them, with implications for millions of forest-dependent people and communities. A number of risks associated with carbon forestry have been identified:

- renewed and even increased state and ‘expert’ control over forests
- support for anti-people and exclusionary models of forest conservation
- violations of customary land and territorial rights
- unequal and abusive community contracts
- land speculation, land grabbing and land conflicts (competing claims for compensation for avoiding deforestation).

The question of who owns the carbon—whether emitted or avoided—has been little debated at the national and international levels. Nor have many countries begun to address the property rights issues surrounding carbon sequestration, emissions and trade. Mired in issues of national sovereignty, most proposed schemes for emission reduction from forest areas overlook questions of equity, ownership, benefit sharing, and development outcomes. Even the simplified modalities for small-scale afforestation/reforestation (A/R) projects within the Clean Development Mechanism (CDM) under the Kyoto Protocol, which were developed to allow communities to participate in the CDM more fully, have proven to be largely out of reach of poor forest communities because of the high installation and transaction costs associated with project preparation. These high costs, and the requirements for clear property rights for investment, have made it very difficult for poor rural communities to initiate A/R CDM projects.

Nevertheless, the global and frightening nature of climate change will keep national governments focused on forest areas and forestry issues and open to negotiating with civil society and forest communities, including indigenous people. There is tremendous scope for making climate-related investments in a manner that strengthens local rights, reduces rural poverty, protects remaining natural forest areas and restores degraded forest areas, all while simultaneously reducing greenhouse gas emissions. Properly devised participatory forest projects would constitute a low-cost option for reducing emissions, sequestering additional carbon and increasing adaptive capacity.

Conversely, an approach that attempts to extend public regulatory authority beyond protected areas in order to control land use and deforestation would be counter-productive. It would reverse the pattern of devolving forest management authority and increase the potential for conflict.

Debate within the UNFCCC on proposed new forest-related mechanisms (including reduced emissions from deforestation and forest degradation—REDD—and carbon markets) has only touched on issues related to local rights to forest resources, equity, governance and legitimacy. Yet because of the need for high standards of implementation, monitoring and evaluation, good governance and equitable approaches are critical. Without them, future forest-related climate change initiatives will benefit only a few, primarily wealthy elites, and reinforce existing economic disparities.
3.5 CONVERGENCE OF FOOD, FUEL AND WOOD FIBER MARKETS: DRIVING A NEW GLOBAL LAND GRAB AND THE CLOSE OF THE FOREST FRONTIER?

Over time, the growth of the biofuels sector will lead to a convergence of markets for fuel, food and fiber. These markets compete both for raw inputs (including maize, sugar cane, wood and switch grass) and for the land on which to grow these commodities; before long, the raw commodities will trade based on their efficiency in producing energy. Key fuel, food and fiber prices are on an upward trend. Figure 3 illustrates the movement in (domestic) prices since 2000 for gasoline, ethanol and corn in the United States, and for non-conifer pulpwod in Brazil; most have at least doubled since 2000.

All three sectors—agriculture, energy and forestry—need cropland and marginal land for expansion, especially in the South, but insufficient land is available. According to the most extensive analysis to date, by Nilsson and colleagues, only some 250–300 million hectares of land are available globally for the production of the three commodities—not nearly enough. Drawing on credible projections by experts in each sector, Nilsson estimates that by 2030 at least 200 million hectares will be required for agricultural production, at least 25 million hectares for industrial forest plantations for conventional forest products, and at least 290 million hectares for biofuels. Moreover, these estimates ignore the demands for land from the chemical industry and for tourism and fuelwood—any of which could arguably take additional

**FIGURE 3. THE RISE AND CONVERGENCE OF FOOD, FUEL AND FIBER PRICES, 2000-2007**

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(USA) Corn
(USA) Ethanol
(USA) Gasoline
Palm Crude oil (Riton)
(Brazil) Non-Conifer Roundwood

millions of hectares out of production. The competitiveness of forestry, particularly natural forest-based forestry, with the food and energy sectors is doubtful.156

The convergence of the fuel, food and fiber markets and the new pressures this will bring have a number of implications: first, that good-quality land will remain a scarce and increasingly expensive resource; second, that there will be even greater pressure to convert remaining natural forest land to agro-industrial crops; and, third, that as a global society we are locked into a market transition that will continue to fuel a speculative rush to secure productive land, despite uncertainty about just what will be produced there—fuel, food or fiber. This speculation—the capture and hoarding of land in anticipation of higher returns in the near future—is driven by the widely accepted view that high oil and food prices are here to stay and that these assets will be in higher demand and are currently undervalued.

In sum, we are arguably on the verge of the last great global land grab. It is quite possible that, over the next several decades, investors and governments will take advantage of the unclear and insecure property rights prevailing in many rural areas, ignore the customary ownership and protestations of local people, and divvy up and lay claim to the remaining public forest domain. Previous land grabs occurred during the feudal and colonial periods, and in recent decades with the misuse of industrial and environmental protection policies. This scenario, should it unfold, will extinguish any possibility that the world’s poor will be able to hold on to their only real capital asset—their land. This analysis focuses on forest areas, but any customarily held lands, including the vast majority of drylands, pasturelands and wastelands, are vulnerable, particularly those with water resources or the potential for mining or mechanized agriculture.357
The world has a unique but fleeting opportunity to stop, rethink, and move in a new direction. Continuing on the same path will certainly lead to more social collisions, more land grabs and an end to the forest frontier within the next few decades. It seems that the world community has been offered two gifts, one a gift of knowledge and the other a gift of breathing space, but both are time-bound. The findings of the Intergovernmental Panel on Climate Change and other analyses have provided a rich body of knowledge on the implications of climate change and have bought the development community a limited amount of time to set in motion an agenda for tackling it. The time must be used wisely.

The knowledge generated from past experience shows us the way forward. Change is already upon us. Governments are reforming old laws and policies; many innovative approaches are being tried in forests around the world and models of local management and enterprise are emerging. Rural people are organizing themselves, gaining better access to information, creating diverse connections and networks, and sharing opportunities and lessons amongst themselves; smallholders and communities are combining traditional knowledge and cultural systems with innovative conservation and livelihood diversification options and creating new forest-based enterprises. Funding bodies are finding more flexible ways to channel resources and respond to opportunities as they emerge. Countries in the “bottom billion” are seeking new paths to development, assisted by responsible investors and companies who increasingly value sustainability as an integral component of their business models.

Although all this is happening, and demonstrates the real possibilities for substantial progress, it is happening in too few places and at too small a scale to avoid continued disaster, deprivation and deforestation. Scaling up requires action on tenure and governance. One set of actions would focus on securing ownership and civil rights for forest communities and indigenous people and complementary reforms in judicial systems to ensure procedural justice and mechanisms for effective arbitration and conflict resolution. A second set of actions would focus on the creation of governance structures to enable local people to effectively use and benefit from their property rights and the removal of those policy and regulatory frameworks—such as public-sector...
In most countries, recognizing local land ownership and reforming regulatory frameworks is part of a larger challenge of rethinking and rationalizing the public domain and reforming the role of the state. While policy decisions and statements recognizing rights require political will, these important signals do not require financial investment. On the other hand, fully implementing reforms so that rights are strong and enforceable takes money.

Decisions on property and broader human and civil rights are challenging in the best of circumstances. In forest areas, the circumstances are usually far from optimal. Forest agencies are often captive to conventional ideas and overwhelmed by challenges that lie beyond the bounds of the forest sector. Overlapping jurisdictions between governmental ministries and departments can paralyze initiatives. Bureaucratic efficiency can be further crippled by a lack of funds and low capacity, and well-intentioned efforts can be distorted and undermined by poor governance and corruption.

In achieving stronger rights for forest communities and indigenous people, there will be tradeoffs. It is useful to identify these, as well as the potential for adverse outcomes, so that they can be better understood, anticipated and addressed.

- Stronger rights can challenge the vested interests of others, particularly those who are using or plan to use the resources for their own economic gain. As momentum builds towards increased property rights for forest people, a counter-movement by large-scale enterprises (e.g. those involved in biofuels production and other agro-industrial activities) could develop in order to dissuade governments.

- The recognition of customary ownership and access rights in forests that are rich in biodiversity will be opposed by some of those who still champion the conventional conservation model based on the exclusion of people from protected areas. Although most of the conservation community has turned in a more people-friendly direction, in some quarters there remains a powerful ideological, political and economic inertia, and there will be great reluctance to give up this power and to relinquish moral authority.

- Strengthening forest property rights for individual smallholders can enable them to become partners in, and beneficiaries of, large-scale carbon sequestration schemes and other forms of PES. Yet the transaction costs for the involvement of individual smallholders in such schemes can be high. To make arrangements work, tradeoffs between efficiency and equity will be required.

- In some cases, strengthened property rights by communities and households will lead

“The failure to harmonise the effects of technical progress with the forces of political and economic organization from an earlier phase do call for a measure of social control to prevent chaos and destitution...It is neither realistic nor morally conceivable that we should give up ...”

—Isaiah Berlin, Liberty
to increased logging or land clearing. In other cases it will lead to improved conservation.

- Local economic growth resulting from strengthened property rights can generate new income and rent streams, which might lead to elite capture. Some aggregation of land will be legitimate and perhaps even necessary in order to achieve economies of scale, but excessive aggregation could increase inequality.

- New landholders might decide to sell their lands to outside entrepreneurs. This could help reduce poverty, but the forest areas might be cleared for agro-industrial or other corporate projects.

- In the overwhelming majority of cases, property rights to forest lands will be conferred to community organizations that are controlled by men rather than women, possibly increasing economic gender inequality.

The risks posed by a rights-based approach, such as those noted above, are low relative to the costs of potential conflict and continued degradation and do not argue against its basic soundness. Good policies will reduce or eliminate both the risks and the need for tradeoffs. Most importantly, all actors should be made aware of the tensions that change might create. Forest communities will need to anticipate the full consequences of achieving property rights and not simply assume that outcomes will benefit everyone or address all their concerns and needs.

The restoration or establishment of full local ownership rights will almost always cause a degree of social tension and produce certain negative effects. Development history demonstrates, however, that the rationalization of the public domain and the strengthening of indigenous and other community rights are critical foundations for social and economic development in forest landscapes. It is also increasingly clear that such rights are central to addressing some of the world's most pressing global challenges.

4.3 STRATEGIC DIRECTIONS: PRIORITIZING INTERVENTIONS IN THE CONTEXT OF CLIMATE CHANGE

As far as forest landscapes are concerned, the challenges posed by climate change, energy and conflict are interlinked with the problems of poverty, contested claims on forest lands, and centuries of oppression of forest-dependent people. All must be addressed simultaneously, yet resources and opportunity are always limited. In the near term the world should pursue the following strategic directions:

- **Prioritize big emitters:** In 2000, Indonesia and Brazil accounted for almost 50% of the world's greenhouse gas emissions emanating from land-use changes. Combined, Indonesia, Brazil, Malaysia, DRC, Nepal, Peru, Zambia, Nigeria, PNG and Cameroon accounted for almost 66% of global emissions from land-use change. Some of these countries, particularly Brazil and Nepal (and, latterly, Indonesia), are also leading forest tenure reformers and therefore should be targeted for the first wave of serious investment in reforming property rights and governance. Success in these countries will not just be symbolic—it will make a substantial difference to forest carbon emissions.

- **Support vulnerable countries:** The forested “bottom billion” countries—e.g. Benin, Cameroon, DRC, Côte d’Ivoire, Liberia, Madagascar, Nigeria and Zambia—are particularly vulnerable to major displacements due to climate change and an associated intensification of conflicts in forest areas. A number of these countries are also major emitters of greenhouse gases. International support to these forested countries should focus on: securing land rights for their forest-dependent populations (removing the major cause of estrangement); the introduction of climate-resilient forest management systems (preventing massive
migration), and ensuring a fair share of the massive investments that are likely to be made in coming years on climate mitigation measures.

- **Ensure transparency and accountability in financial arrangements to deal with climate change**: Donors are making major commitments to combating climate change, a significant portion of which will undoubtedly go to the forest sector and to established multilateral organizations, including the World Bank. Given the general distrust of development assistance and the high social, political and economic costs of continued contestation and conflict, it is imperative that the global community develops, with the support of forest communities, civil society and developing country governments, effective ground rules and monitoring systems for the deployment of these funds. These monitoring systems will need to show where investments are being made, the purpose for which they are being made, and the impacts they are having. As it responds to the climate crisis the development community will need to demonstrate its commitment to full accountability and transparency. The size of the challenge demands that every dollar is made to work and that everyone concerned knows that it does.

- **Ensure that carbon markets and other environmental service compensation mechanisms strengthen rights and governance and support forest communities**: Linking REDD to international carbon markets could increase the flow of funds to forested countries. Some countries with the highest potential for REDD score poorly on governance indices, and a purely market approach might produce few synergies between REDD and development benefits. The efficient channeling of carbon finance towards areas and countries that are priorities for conservation and development will be improved by supplementary international funding for REDD initiatives that specifically aim to enhance non-carbon benefits. The purpose of supplemental funding would be to create conditions that will help the market to work: secure forest access and ownership; the removal of regulatory barriers to allow equal and full participation of small forestholders; and the involvement of smallholders in policy negotiations.

  Windows for political reform can open quickly and just as quickly close. It is in moments of openness that the international community should immediately engage—to help governments and their civil societies rethink and reform tenure and governance in forest areas. International development agencies have made many attempts to prod governments towards reform when they have been neither ready nor willing. Creative investments, particularly to support interested reform agents and civil-society actors, build constituencies and capacities that eventually help countries to shift from stuck to active. But only at certain moments will major investments produce dramatic results. Interestingly, it seems that countries that are truly open to rethinking their tenure and governance systems are those in which the political elite either perceive national security threats if tenure is not addressed (as in China) or countries in post-conflict situations (such as Liberia), where politicians recognize the risk of reverting to conflict if tenure and rights regimes are not reformed.

  The international community will need to be more active in tracking political openings and in assisting countries when windows of political opportunity open. This type of readiness requires supporting mechanisms that are flexible and responsive and that are capable, at short notice, of producing teams and networks of supporting institutions and ensuring adequate funding for implementing large-scale reform projects.
The forest areas of developing countries, for so long havens of poverty and underdevelopment, can be transformed into socially and economically vibrant, culturally rich and politically secure landscapes. The beginnings of this transformation can be seen in recent developments upon which all development actors can build:

- the increasing capacity of local people to organize and strengthen their local governance structures;
- the democratic openings, freer press, and growing government transparency that is leading to increased state recognition of indigenous and other local community tenure rights;
- a widely tested and proven set of approaches and technologies for identifying customary property claims, mapping and demarcating them, and facilitating negotiations between communities and between communities and the state;
- the vital and growing presence of small-scale forest enterprises and expanding linkages to diverse markets and corporate players and investors; and
- the growing political sophistication of civil-society organizations, which is enabling them to open up political space for tenure reform, craft political alliances, and draw on strategic ideas and lessons to help craft national and regional solutions.

Despite the challenges, the potential has never been greater for the global development community to help create a better world. In the coming decades, governments and the private sector will spend billions of dollars on energy, food, and climate-related projects in or near forest areas. Those projects will only be effective and long-lasting, and will only avoid contributing to resentment and conflict, if they help repair the system of governance and restore rights to forest communities. The development record clearly shows that riding roughshod over local rights and local initiatives creates disparities in wealth that cannot be reconciled by further growth and investment, and a discontent that cannot be controlled by security forces.

Diversity is the key to adapting to climate change: diversity in land-use systems, scales of production, local institutions, and cultural and social values. Small-scale enterprises and diverse agroecological, silvicultural and pastoral systems provide the greatest flexibility in the face of rapid change and uncertainty. Rather than centralized mechanisms and comprehensive plans, what is needed are open, responsive and democratic processes of decision-making that enables local people and their governments to find their own solutions to national and global challenges.
Building on these trends and seizing the opportunity that climate change offers for more effective ODA will require the engagement of governments, private companies, donor organizations, research institutions, NGOs, and members of wider civil society. All are important in creating the conditions in which local people and their governments will be able to find lasting solutions to the challenges they face. Here, we identify essential areas of intervention and investment. Work in each is under way in various places around the world—but not yet at a sufficiently large scale.

5.1 A NEW DEVELOPMENT AGENDA FOR FOREST AREAS

1. **Scale up investments in recognizing land ownership and strengthening local voices and governance in all forest development interventions.** The underlying problems in forests lie more in the political than the technical realm. Urgent, substantial and sustained progress on poverty, conflict resolution, economic growth, conservation and climate change mitigation and adaptation all require the establishment of clear ownership rights and more equitable governance—whereby local people, in partnership with their governments and private actors, can incrementally devise and craft their own solutions over time. These efforts must be particularly sensitive to gender and the roles and rights of women and youth. In coming years donors and governments will invest billions of dollars in climate-related measures. A major portion of this should be to secure rights to land and carbon, delineate tenure boundaries, establish institutions that enforce rights, and remove regulatory barriers that prohibit the entry of smallholders into the market place.

2. **Proactively move beyond the conventional forestry and development agencies and prioritize reforms of the major policy levers affecting forest areas—including trade, taxation, and administration of related government sectors.** Advancing tenure and regulatory reforms, and enabling forest communities to develop economically and adapt to climate change, will require governments to fully engage a wider range of ministries and sectors, both in developing countries and in those developed countries trying to help. In developing countries, the reform of property rights will depend on the coordinated efforts of multiple ministries and agents. Establishing fair and democratic judiciary and arbitration systems will be critical. The forestry community also needs to better understand and influence other sectors, including energy, mining and agriculture. Both developed and developing countries will need to better use trade policies and agreements to promote economic opportunities for rural forest and agroforestry producers, particularly since trade is much more powerful than aid in influencing development.

3. **Rethink and reorganize forest development approaches and institutions to respect rights, serve forest owners, and help deliver needed tenure and governance reforms.** Advancing and scaling-up global efforts on rights and governance will require major adjustments to the dominant development paradigms and organizational structures. Public forest agencies remain relevant, but their mandates and regulatory powers will need to be realigned to the new distribution of public and private land rights. Many forest agencies will need to reorganize staff and programs to better serve their new constituents and to help them respond to the new global challenges. Creating accountability will require greater local voice, greater inputs from social development specialists, and the capacity to learn from and respond to social audits of results on the ground. Forest agencies will need to develop new partnerships with other ministries and NGOs to help carry out the scaled-up programs to reform property and governance systems. There are far greater opportunities for improving the livelihoods of the poor than by the enabling...
of their industry. These industries also foster a stronger economy.

4. Fully integrate forest communities in crafting, testing and carrying out policy reforms and interventions. The full participation of local people is essential. Local people are experimenting continually with a diverse range of land uses, livelihood and income strategies, and institutions. Their experiences need to be supported and heard and, ultimately, used in the development of strategies and technologies for REDD. Government and donor project funding should go less to intermediaries and more to local organizations, which should be given the flexibility to fund their own priorities. Existing initiatives, such as VPAs and certification, should be considered in the light of their ability to advance rights and governance and in their responsiveness to the needs of forest owners. The degree to which local people, via their local organizations and governments, begin to drive rather than respond to development initiatives should be a key indicator of success.

5. Integrate and mainstream tenure reform into the architecture of international relief and conflict management: Despite the recent focus on and efforts towards climate change mitigation and adaptation, the world is likely to experience many climate change related disasters and an escalation of conflict in forest areas. Given the important role of tenure security in both conflict and vulnerability to climate change, international relief agencies must ensure that property and governance challenges are addressed as key elements of disaster responses.

5.2 ACTIONS BY THE GLOBAL DEVELOPMENT COMMUNITY

Many national-level policymakers, investors and initiatives are influenced by global-level institutions and initiatives, including multi- and bi-lateral donors and organizations, certification, the VPA process, the Forest Law Enforcement and Governance dialogues, the United Nations Forum on Forests, the World Trade Organization and the International Tropical Timber Organization. Achieving progress in forest areas will require that these instruments and institutions are at least supportive of, if not directly engaged in, advancing reforms in forest rights and governance; it is particularly important that none undermines such reforms. Critical actions include:

1. Condition REDD and all funding for conservation, and other forest-related post-Kyoto investment, on the recognition of rights, including forest tenure, and adequate forest governance. There is an internationally recognized bundle of rights, grounded in national constitutions and international accords, the establishment of which is an indispensable condition for secure tenure and the avoidance of forest conflict, as well as for local socioeconomic development. Respecting and responding to these rights should be the starting point for all conservation initiatives and private investments in forest areas. Indeed, given the influence that the conservation movement and the investment community have in many forests, these actors could become leading advocates for rights-based approaches. No investments should be made in REDD unless the rights of local people are fully respected and have given their consent to the transaction. No investments should be made in new public protected areas until the rights and governance of existing areas are justly resolved. The 2003 IUCN Durban Accord on World Parks provides a good basis for establishing social policy standards in addition to those for indigenous peoples and for implementing them more systematically.

2. Develop new capacity to diminish forest conflict, and pro-actively engage in post-conflict countries to advance tenure and governance reforms. Recent
experiences in Kenya, Liberia and elsewhere show that the land issue is dealt with inadequately in both pre- and post-conflict situations. Technical capacity in this area should be strengthened and, possibly, new mechanisms established to enable timely and comprehensive responses. A greater sharing of lessons between policymakers and civil-society groups on the role of tenure and access in conflict could lead to earlier interventions to reduce conflict or prevent its re-emergence.

3. **Prioritize support to those community organizations and networks building their capacity and knowledge and funding their own priorities directly.** Many indigenous peoples and other community groups are forming organizations: examples include the Coordinating Association of Peasant and Indigenous Agroforestry Communities of Central America (ACICAFOC), the National Federation of Forest Users, Nepal (FECOFUN), and the National Confederation of Indigenous Peoples of Bolivia (CIDOB). These organizations are growing in strength and outreach and are becoming savvy contributors to domestic and international policy debates. Community-support NGOs—such as the Foundation for People and Community Development (FPCD) in Papua New Guinea, Civic Response in Ghana and the Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC) in Thailand—are increasingly capable of and influential in advancing community agendas. In addition, new community organizations such as the Global Caucus on Community-Based Forest Management and the International Alliance of Indigenous and Tribal Peoples of Tropical Forest Areas are operating at the international level to foster community voices. Such organizations warrant financial and technical support.

4. **Help international and civil-society actors advocate for the early and comprehensive adoption of transparency commitments and freedom of information acts.** The Extractive Industries Transparency Initiative and Publish What You Pay are promising innovations for industries active in forest areas. Extending or adapting these to others in the forest sector should be considered at the national and international levels. Interventions could support public access to information on land and forest classifications, ownership and access rights, and permitting, licensing and concession systems. Freedom of information acts are increasingly common but more attention needs to be paid to implementing them effectively.

5. **Support information exchanges between strategic actors at the global and regional levels to catalyze synergies and momentum for reform.** Governments concerned with forest issues or engaged in reform processes are interested in the experiences of other governments but rarely have the chance to share information in a meaningful way. Many of the current spaces for intergovernmental dialogue are diplomatic in nature and ineffective for learning. On the other hand, informal intergovernmental dialogues can be very valuable: the recent dialogue on forest trade and tenure reform between China and the Mekong Basin countries, and the meetings of governors in the lowland Amazon, are both positive examples. Opportunities to increase the exchange of experiences at the regional level include: packaging, translating and summarizing information about experiences in a form that is accessible and useful to governments in specific regions; creating informal regional meeting spaces and learning exchanges; and identifying ways of inserting dialogue and learning into regional economic forums.
Climate change has shifted the focus of many in the development community to the global level. The most important place for action, however, remains at the country level—where decisions and investments are made that directly affect forests and people. From the perspective of developing countries, the potential value of investment in REDD is enormous. Climate change mitigation and the urgency of adaptation measures provide governments with political momentum for addressing rights and governance, rethinking policy and legal frameworks and public sector roles and responsibilities, and mobilizing additional funds for this purpose. As well as facilitating investments in REDD, such responses will help reduce violent conflict, increase capacity for adapting to and mitigating climate change, generate returns from new productive activities, and assist the delivery of multiple ecosystem services from forest areas.

1. **Scale up efforts to recognize local rights and clarify forest ownership and access.** Many governments have made progress on issues of rights, forest ownership and access, but many more are only now starting to consider them. Strengthening the ability of communities to protect their rights and engage with governments and private-sector investors is a key starting point. Rights granted on paper are not enough on their own. Communities need tools to monitor and defend them, both in situ and in court. Governments can legitimize and finance community mapping and related social processes for negotiating and identifying local rights of ownership, access, management and use in forest areas. Effective ways should be found to reconcile agrarian reform, titling, adjudication, and the allocation of land for resource extraction with the effective recognition of forest tenure. Lessons can be learned from other countries and fed into national dialogues, whereby national constituencies become better informed regarding their options and associated tradeoffs.

2. **Establish the policies and institutions required for rethinking and reforming the organization of the public forest domain.** Forest and land use agencies need to rethink boundaries and responsibilities, as well as the balance between establishing an enabling environment for forest management and use, and the enforcement of necessary controls. National and local judicial systems need to be supported so that they are accessible to all parties. Lessons can be learned from other countries on the process, nature and pace of reforms and fed into national dialogues. In this way, national constituencies will become better informed regarding their options and associated tradeoffs and political consensus can be built. Like other forms of PES, climate change instruments will require a nested set of institutions that few countries have experience in establishing, and which must fit specific country realities. Governments need to clarify property rights in relation to ecosystem services in a manner that supports the recognition and strengthening of tenure rights. Local governance and civil-society and private-sector intermediaries will also need to be strengthened.

3. **Strengthen citizenship, human and civil rights.** Rights to property and resources are an important starting point but insufficient on their own. Many other rights must be established, including: the right to life; civil and social rights; the right to gender equality; political freedom; cultural rights; economic rights; and the right to a healthy environment. Such rights are essential if previously disenfranchised forest peoples are to fully participate in government and policy processes and to take advantage of market opportunities.

4. **Encourage the spread of small and medium enterprises, and associations with larger industry.** Provision of rights and tenure establish the foundation for enterprises at various scales that enhance incomes and well-being. Leveling the playing field for small and medium enterprises by eliminating the direct and industry subsidies, including taxes or special access to research and training, or favored access of large industry to infrastructure or energy subsidies, can provide space for growth and investment. Access to appropriate technical and financial support can enable enterprises to thrive in markets.
in socially and culturally coherent ways, increase participation of women and youth in urban and rural locations, and generate a range of benefits, less socially grounded industry cannot. Associations and partnerships, both among themselves and with larger private industry will enable them to reach scale and engage in new markets.

5. Remove regulatory barriers and encourage voluntary compliance to support rights. In many countries restrictions on the commercial and subsistence use of forests, such as those posed by zoning, permit systems, management plan requirements, and designation of species and areas that are off-limits to commercial harvests result in abrogating the local rights that have been recognized for forest use, access, and ownership. Overall, there is a need to move from command-and-control regulatory frameworks to systems that encourage best practice and compliance. Simplified regulations and minimum standards should be promoted, including those that govern harvesting, transport and the legal establishment of enterprises.

6. Support diverse land use and management systems at varied scales. The integrated and diversified management of the landscape by forest communities and forest dwellers in diverse ecological systems provides multiple streams of income and innovative conservation options, as well as experience in adapting to variations in climate. Recognizing this diversity of systems in customary tenure regimes and customary governance institutions, reconciling them with statutory tenure and other formal legal systems, and providing technical and financial support, are important steps in developing resilient and affordable climate change adaptation strategies.

5.4 ACTIONS BY COMMUNITIES AND CIVIL SOCIETY

Communities need tools for monitoring and defending their rights, both in situ and in court. Development agencies, extension agents, NGOs and the private sector should help communities engage with those who wish to exploit their lands and, in so doing, help them to defend their rights and to benefit from the economic activities that are being pursued. Such actors should also support, at the national level, new cross-sectoral thinking regarding the optimal allocation of the public forest domain.

1. Invest in community networks, longer-term training, and the professionalization of community members and leaders. Technical service providers and intermediaries will always have a role to play, but communities and smallholders need much more expertise of their own. Networks and associations can also commission market and policy analyses, as large private-sector companies routinely do, adding to the ability of communities to plan and grow enterprises and their advocacy initiatives.

2. Prioritize resources and training to support community organizations and entrepreneurship.

New models of alternative tenure, markets and industrial standards need to be identified and scaled appropriately so that they are accessible and feasible for small-scale producers with a wide range of production capacities, organizational capabilities, cultural values, financial credit options and national regulatory environments.

3. Build constituencies and alliances for reforming policies and regulations, including forest tenure and governance, and leveling the playing field for SMFEs and community scales of management. Political alliances involving local producer networks, private industry, government agencies and civil society will lead to greater transparency in forest markets.

4. Advocate the early and comprehensive adoption of transparency commitments, freedom of information acts, and the development and dissemination of empowering and enabling technologies. Few interventions can be so effective in bringing about change, and so constructive in building accountability in all sectors—public, private and civil—than those that increase transparency. Support can be provided.
to improve public access to information on land and forest classifications, ownership and access rights, permitting, licensing and concession systems. Inevitably, an independent, vigilant media and well-informed civil-society networks will encourage accountability and transparency in government and the forest industry. Innovations that facilitate communication among communities and solutions to locally-defined problems and needs should also be encouraged.

The private sector plays a key role in socioeconomic development and an increasing number of companies already subscribe to guidelines of corporate social responsibility. Many would be willing to conform to new rights regimes—and to take advantage of new business opportunities arising from an expansion in the scope of rights and livelihood options for local people. Other companies, however, will strive to avoid or even resist any restraints that might be imposed on their investment opportunities by expanded local rights. The following recommendations are aimed at encouraging stronger contributions from all private-sector actors.

1. **Promote widespread adoption of practical and enforceable standards for responsible corporate and industrial practice.** The forest and agro-industrial sectors, in particular, need to better self-monitor and self-police in order to maintain their social license to operate in developing countries. Codes of conduct should be designed in a manner that ensures transparency and accountability. The World Business Council and related international industry associations are increasingly active in this arena. These standards should embrace the right of individual, communal and minority landowners to give or withhold their free, prior and informed consent to activities or actions that might affect their lands and livelihoods. Incentives-based approaches, coupled with enforcement targeted at the most egregious violators of the rules, would make it clear that responsible corporate behavior is also good business practice.

2. **Identify business opportunities with local producers.** There is a need for more vigorous analysis and promotion of business models that are pro-poor and that contribute to more widely-shared economic growth. Similarly there is a growing need to connect investors with the commercial enterprises of small producers. Stronger and more equitable partnerships in developing countries can support the resolution of indigenous and community tenure conflicts, serve the mutual interests of communities and industry, and creatively leverage market forces for greater social and economic development. The growing SMFE sector provides new business opportunities, including technical and marketing services, the transformation of new products, and links to international buyers.

3. **Develop alliances with low-income producer organizations to lobby for responsible policy reforms.** Such alliances could help adapt existing sustainable forest management and certification standards so that they are more accessible to small and community forest owners and enterprises. They could also help to educate the business and finance sectors on rights issues related to biofuels, climate change mitigation, and other large-scale activities in the forest sector, and to disseminate experiences and lessons learned from regulatory and tenure reforms. Top-quality market and policy analyses—the sort that large private-sector companies routinely commission—should assess the conditions necessary for encouraging the growth of alternative tenure and enterprise models.
Many of the development models still in use in forest areas persist despite their continued failure. We can do better now. The rise of forest-community advocacy groups and SMFEs, coupled with shifts in the attitudes of governments towards land reform and rights, suggests that we are on the threshold of a new and exciting era in the development of forest areas. We must cross that threshold: failure to do so will have very large and long-lasting consequences.

Thirty years ago, Jack Westoby saw the writing on the wall for traditional development assistance models:

“Wise governments will digest and apply the lessons of the last two decades of bitter experience. They will take a cool and calm look at the prospects of quick and easy export earnings ... and not sign away their resource heritage. ... The choice between need-oriented industry and profit-oriented industry is a political, not an economic choice. Once power is exercised by or on behalf of the broad population, then, and then only, will the contribution of forest industries to socio-economic development start to be realized.”

Few people listened then, but the world has changed. We have the opportunity to blaze a new path. Terms like human rights, land reform and governance are perhaps still uncommon in the plans and priorities of forest development experts, but there is compelling evidence that they need to come to the forefront. Much can be learned from experiences in other sectors, as well as from the numerous positive efforts under way already in the forestry arena. These experiences demonstrate that it is possible to carry out reforms, recognize rights, avoid deforestation and forest degradation, reduce conflict, and improve livelihoods and wellbeing in the forest. Most importantly, they also show that many millions of rural and forest people are anxious to move ahead. We just need to give them the chance.


De Koning, Capistrano and Yasmi 2008.


Note that the calculations for this data use ITTO producer countries as a proxy for determining “forest-rich” and “forest-poor.”

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Westoby 1987: 312.


Bilateral flows of aid have declined from over US$1 billion in the early 1990s to US$600-900 million at the end of the decade. During the same period multilateral flows declined from over US$1 billion to US$400 million.


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Westoby 1987: 312.


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88 Alcorn and Royo 2007. As cited in endnote 85.


The reality for developing countries is that many SMFEs exist within the informal sector. Attempts at defining the informal sector, also known as the shadow, hidden, illegal or underground economy, have been made and employed in various contexts.”


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This overview paper draws and builds on the following eight papers prepared by partners and collaborators of the Rights and Resources Initiative:


- **de Koning, Ruben, Yurdi Yasmi and Doris Capistrano.** 2008. *Forest Conflict and Tenure.* Center for International Forestry Research and RRI.

- **Robledo, Carmenza, Jürgen Blaser, Sarah Byrne and Kaspar Schmidt.** 2008. *Climate Change and Governance in the Forest Sector.* Intercooperation and RRI.


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