

Forest tenure, Governance and Emerging Global Challenges

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The Rights and Resources Initiative

The Rights and Resources Initiative is a global coalition to advance forest tenure, policy and market reforms. RRI is formed by 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 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. Please visit <http://www.rightsandresources.org> for more information.

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I. Introduction

After years of preparation for the MDGs and of more rigorous effort to improve the effectiveness of aid, the global development agenda has recently lost prominence to the more pressing political issues of “security”: energy security, national security and ecological security, including climate change and the growing crises concerning water. That being said, even among those preoccupied with security, there is growing recognition that these crises are at least partly due to the same set of underlying problems that gave rise to 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 governance institutions.

Less well recognized is the fact that many of these challenges converge in the 30 percent of the Earth’s surface that is considered forest, and particularly in developing countries that are heavily forested. These areas remain chronically poor and poorly governed, and for these reasons forest areas suffer from conflicts, crises and corruption, which often spread to national and regional levels. The human, civil and political rights of indigenous peoples, women and other marginalized groups are frequently limited, if not unrecognized in forest areasⁱ and over 30 forested countries have experienced widespread violent conflicts over the last 20 years, much of it fueled by the inequitable distribution of resources and ethnic tension.ⁱⁱ

The number, nature and extent of these conflicts is likely to increase manifold as pressures on lands, particularly forest lands, will increase due to the rapidly rising demands of global economy, massive the surge in demand for energy and growth of biofuels, the convergence of food, fuel, and wood fiber markets, and the impact of climate change and associated mitigation measures.

This paper presents an overview of the major global forces that will shape our options and opportunities to advance social and economic development in forest areas in the future; current status of forest governance and tenure; and some positive developments to build future strategies.

II. Key Forces Shaping Future Options and Opportunities

Major shifts in the global economy, as well as in social, political and ecological systems are already affecting forests and forest livelihoods. As a result the challenges that the forest sector will face in the future will be different, both in type and magnitude, from those faced today. Forest landscapes are more embedded in the global economy than ever before, and in the next few decades the rising influence of countries like China and India, and the demands of other sectors – food, energy, transport, and communications – will shape the way forest landscapes are used and governed. Moreover, the ecological crises of climate change and water scarcity are likely to shock and shape all rural livelihoods and institutions.

Growth of the BRICs and Relative Decline of US/ Western Economies

Over the next 50 years, Brazil, Russia, India and China—the BRICs economies—will become a much larger force in the world economy. Global GDP is projected to increase from \$55 trillion to \$80 trillion by 2020 and to \$150 trillion by 2100. At the projected pace, in less than 40 years, the BRICs economies together could be larger than the G6 (in \$US terms); by 2025 they may account for more than half its size.¹

Wealth creation in developing countries, increased consumption, and continued population growth will have a substantial impact on the demand for commodities – and in turn increase pressure on natural forests and landscapes. As the economies of China, India and other middle income countries grow so too do their appetites for energy, agricultural products, water, forest products and other basic commodities, both to feed their own markets and to produce finished products for export.

Global demand for food is projected to double by 2020, as is production of palm oil.² While demand for meat is expected to increase only 50% in this same period, the increase in livestock will have a disproportionate impact on land and forests – both because it will multiply the demand for cereals for feed, and thus forest conversion, and because it will multiply the production of methane – jointly magnifying impacts on the global climate.³

The growing role of Asia is particularly important. In 2005 alone, China and India together accounted for 24% of the world's consumption of palm oil.⁴ Other commodities show parallel trends: since 2001, sugar prices have doubled, prices of oil, steel, and gold have tripled, and copper prices have quintupled – primarily due to growing demand from China.⁵ An important, and related, trend is that while the global economy is expected to double in the next three decades, global trade is expected to triple in this same period.⁶

Is there sufficient land in the world to meet this unprecedented increase in demand for commodities? A recent study concludes that if there is no significant increase in productivity (second green revolution), the amount of additional land required just to meet the projected food demand of the world by 2050 would exceed 3 billion hectares (Nilsson 2007), nearly all of which would be required *in developing countries*. It goes on to say that this will in reality not happen as there will be different correction mechanisms but it illustrates the magnitude of the problem.

¹ Global Economics: Goldman Sachs. 2003.

² IFPRI 2002. IFPRI Impact Projections. 2020 Vision. Water and Food to 2025. and FAOSTAT.

³ FAO, 2006.

⁴ USDA 2005. Oil; Palm - Production, Consumption, Exports, and Imports Statistics.

⁵ The Economist, 2006.

⁶ Global Prospects, The World Bank, 2006.

Energy: Big Changes, Big Unknowns

In terms of energy use we see two shifts that will influence forest tenure and governance in the coming decades: (1) a massive surge in demand for energy and (2) the rise of alternative energy sources, including biofuels.

By 2030, demand for energy is projected to increase by 50%; demand for oil alone by 40%.ⁱⁱⁱ Alternative energy sources, particularly biofuels, are growing rapidly. In response to the perceived need for more biofuels, significant amounts of capital have been flowing into the emerging global biofuels industry. One of the key drivers for this is government-mandated minimum renewable fuel content, with the primary focus on the transport sector. Some analysts expect capital to continue to flow into the sector once the re-pricing of risk in the financial markets is completed later this year.

Don Roberts of CIBC Canada estimates that financings in the global biofuels industry rose from roughly \$2.5 billion in 2005 to \$4.7 billion in 2006 and almost \$2.5 billion in just the first quarter of 2007 alone. These incremental shifts are already having important influences on prices, both of the commodities that are used to produce the fuel (such as corn for ethanol) and on the land where these commodities might be grown. Growing demand for bio-fuels has already exacerbated food security issues, hunger, and inequities between rich and poor.^{iv} The growing number of food riots, over tortillas in Mexico and pasta in Italy in 2007 are stark signals over the impending social and political fallout over these shifts.^v

OECD/IEA (2006) assesses future biofuel consumption as illustrated in Table 1:

Table 1: Projected world biofuels consumption (million tons of oil equivalent).
Source: OECD/IEA (2006).

2010	2015		2030
With No New Government Measures On Climate Change			
Europe	14.8	18.0	26.6
US	14.9	19.8	22.8
Brazil	8.3	10.4	20.3
China	0.7	1.5	7.9
India	0.1	0.2	2.4
Total	41.5	54.4	92.4
With Government Measures			
Europe	16.4	21.5	35.6
US	16.4	27.5	42.9
Brazil	8.6	11.0	23.0
China	1.2	2.7	13.0
India	0.1	0.3	4.5
Total	48.8	73.0	146.7

This means some 100 million Toe of biofuels (in the case with subsidies). This corresponds to, in a very conservative estimate, some additional 35 million ha of land. A major shift is already taking place in many countries; for example, Brazil plans to increase its sugar cane ethanol production from its current 16 billion to 44 billion liters by 2016 bringing an additional 4.5 million

hectares of highly productive land under bio-fuel crops. China is planning to increase its corn-based ethanol production from 1.5 billion liters to 3.8 billion liters during the same time period. This corresponds to an additional high quality land demand of 75,000 ha. The oil palm production in tropical regions has nearly doubled in less than 10 years increasing the land area under such plantations from 6.5 million hectares to 12 million hectares.

Forest Industry and Trade

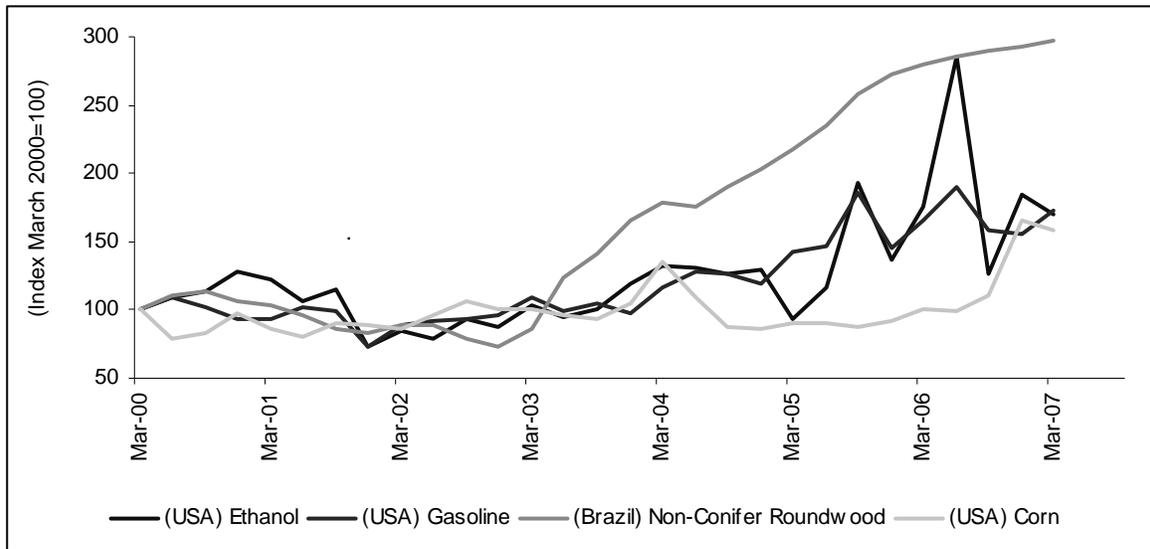
The forest sector itself will be affected by the aforementioned shifts in other sectors, as well as shifts internal to its industry and production patterns. Key among these transitions are the strong growth in domestic demand for forest products in developing countries (relative to the more mature northern markets), increased supply from industrial plantations, the increasing integration of small and medium producers in national and regional market chains, the growing possibility that lingo - cellulosic ethanol and other emerging technologies will become viable and expand, and the growth of certification and Corporate Social Responsibility (CSR) instruments, such as the Voluntary Partnership Agreements.

Given the most recent developments with respect to consumption of industrial wood, a plausible development would be that in 2020 the industrial wood consumption would be around 1.85 billion m³/year and over 2 billion m³/year in 2030 (based on information from ITTO (2006b) and STCP (2007)).

This means substantially increased demand on industrial wood during the next 15 years and increased demands on land. At the same time there will be continued demand at a substantial level for fuelwood and charcoal in certain regions of the world (e.g., Africa, India, China, Latin America) which is heavily supplied by poor households, as an important source of their income as well as consumption. The demand on industrial wood fiber will continue to increase and there is already now tight demand/supply conditions for industrial wood. The latter is already causing an increase in wood costs and increase in land prices in potential plantation countries. Nilsson (2007) cites the case of the land price development in Uruguay where within less than three years the land prices have increased three times and notes similar developments in other tropical countries and in China.

Convergence of Food, Fuel and Wood Fiber markets

The biofuels sector will continue to experience significant growth over the coming decades, and over time its development will lead to a convergence of the markets for fuel, food and fiber (e.g. wood). These three markets will converge in the sense that their primary feedstock will tend to trade on the basis of their "energy equivalency" (Don Roberts 2007). Key fuel, food and fiber prices have been on an upward trend. Chart below illustrates the movement in (domestic) prices since 2000 for gasoline, ethanol and corn in the United States, and non-conifer pulp wood in Brazil.



Food, Fuel and Fiber Prices (Domestic Currency): Q1/00 to Q1/07

Source: Don Roberts (2007)

All of this means that all three sectors - agriculture, energy and forestry - are looking for cropland and marginal land for expansion especially in the South. The conclusion is very obvious; there is not enough cropland and marginal land available. Sten Nilsson finds that there are only some 350 million hectares of land available, globally, for the production of all of these different commodities – There will be a stiff competition between the three sectors and it is doubtful if the forest sector will be competitive with food and energy in the South.

Climate Change: More Heat and More Uncertainty

Both social and ecological systems will face serious adjustments due to climate change. Forest systems are integral to the climate system. The Stern Review in particular has provided new, robust estimates for the implications and threats posed by climate change, galvanizing western governments and the mitigation debate. A new urgency to act is spreading worldwide, and in many countries the political will to act has become a reality, increasing the opportunity but also increasing the risk of poorly conceived and targeted projects.

The United Nations Framework Convention on Climate Change articulates two approaches for addressing climate change: mitigation (i.e. reducing emissions and increasing carbon sequestration) and adaptation (i.e. adjusting to the already changing climate). Forestry activities are key options for both adaptation to and mitigation of climate change.

The Kyoto Protocol is the binding agreement under the Convention that regulates mitigation until 2012. The Protocol is mandatory only to those countries that have ratified it (some countries such as the USA are not members yet and Australia recently joined in December 2007). At present, forestry activities in developing countries under the Kyoto Protocol's Clean Development Mechanism are highly over-regulated. This means that a high level of expertise is required to get projects off the ground, along with heavy investment – thus discriminating against poor forest communities. Even the so-called simplified modalities for small-scale reforestation/afforestation projects under the Clean Development Mechanism, which were developed to allow communities to participate in the CDM, have proven largely out of reach given the high installation and transaction costs of project preparation.

These high costs, and the requirements for clear property rights for investment, have resulted in the current situation where almost all projects to date have targeted either publicly-owned reforestation areas or private plantations. Initiatives in respect to the protection of existing carbon reservoirs financed through the voluntary carbon market have been mainly focused on publicly-owned, protected areas and their experience in including local people can only partly be applied for a future, more holistic approach to include forests in the carbon market. These experiences illustrate that, as they are currently structured, carbon markets have been inequitable, thereby posing the risk of aggravating the growing economic gap between the forest dwellers and the rest of society.

A second important implication is that, being a global phenomenon with important effects in most, if not all nations, climate change brings governments back to the table. A related effect will be the interest of some environmental groups and governments to extend public regulatory authority across landscapes beyond currently protected areas and thereby increasing conflicts with local property owners, Indigenous Peoples and other local communities. If the forest options for addressing climate change are to be adopted in a manner that avoids further conflicts, it will require a serious improvement in governance of the forest resources that goes beyond the traditional notions of governance and includes clarification of forest tenure and use rights in favor of local dependent stakeholders. Without taking robust and proactive steps to clarify and strengthen the property rights of rural and forest peoples, future climate change initiatives will benefit only a few, primarily wealthy elites, and reinforce existing economic disparities.

Unfortunately the entire debate within UNFCCC and the proposed forest mechanisms (including REDD and carbon markets and other environmental services market) seem singularly devoid of any discussion of local rights on forest resources or for that matter any attention to equity and legitimacy. The newly climate-empowered governments are already reeling under the tremendous pressures of the market emanating from the convergence of food, fuel and fiber markets and are ill equipped to craft the new markets where the public goods with uncertain prices are being internalized in a system where beneficiaries from this market exchange are not necessarily the direct users of the resource. The history of forest governance provides little evidence that the outcomes this time would be very different from the past. The prevalent models of forest governance in a large number of developing countries face daunting challenges of their own and are not equipped to deal with these global challenges outlined above.

III. Challenges Facing Forests and People

Forest landscapes in much of the developing world present some of the worst cases of human right abuses, poverty, and conflicts while the forest governance structures continue the pre-colonial tradition of resource exploitation with scant respect for the communities inhabiting them.

Human, Civil, and Property Rights

Over much of the developing world, the human, civil and political rights of forest-dependent peoples remain denied or insecure. In some countries, forest peoples lack even the most basic recognition. The hill tribes of Thailand and the pygmies of Central Africa, for example, lack citizenship papers and are unable to secure rights to land. Typically, forest agencies ignore the rights of local people, concentrating instead on delivering financial revenues, environmental services and sustainable yields of timber. An effective rights-based approach to forestry reform to ensure justice and poverty alleviation requires attention to a much wider spectrum of rights than just the assertion of the right to property.

Tenures must be appropriate to the culture and context of the communities concerned. Communities need to be able to control their lands and resources. Cultural heritage should be protected. Basic rights to health, life and to civil and political rights and freedoms need to be secured and social, cultural and economic rights respected. Although such rights are often recognized in countries' constitutions, in international customary law and in nationally ratified human rights treaties, they are rarely taken into account in narrow sectoral decision-making about forests. Forest governance systems need to secure this broader spectrum of rights if forest peoples are to benefit from forestry reforms.

Without secure access to land, many more people will be forced to act "illegally" – for example, by cutting timber and hunting on state land – simply to survive. A failure to acknowledge the rights of forest-dwelling communities will increase the chance of violent conflict. Already, indigenous people suffer disproportionately from large-scale development and conservation projects. The failure to recognize their right to free, prior and informed consent will inevitably bring more communities into conflict with the state and big business.

The effective recognition of forest peoples' rights needs to go beyond establishing rights of tenure. The wider set of rights which must be recognized include the rights of citizenship, the rights to ownership of territory and ancestral domains, the rights to control their lands and forests as self-governing communities, the rights to market and commercialize forest products, the rights to give or withhold free, prior and informed consent to activities that affect their lands, and the elimination of all forms of discrimination, not least against women.

Poverty in Forest Areas

Poverty and forests are intimately linked. Hundreds of millions of people live in forested areas in developing countries. Forest dwellers make use of forest resources – fuelwood, timber, thatch, forage, foods, and medicinal plants – to meet a portion of their basic needs. The rate and severity of economic poverty of forest dwellers tends to be disproportionately high as compared to people living outside of forests. Many of the world's indigenous and ethnic minority communities inhabit forests. For example, 84 per cent of India's 'tribal' people live in forest areas.

Unsecured property rights over forest lands and resources are one of the key reasons why forest poverty is so widespread and persistent. Linked reasons for forest poverty include: remote areas tend to be relatively untouched by modernization; forest peoples tend to be politically powerless

and lack the means to stand up to outside interests who wish to exploit their land; forests also act as a magnet for migrants, some of whom are poor; and the rate of government investment in remote rural areas is generally low.

Some forest poor will exit poverty through migration away from the forest, conversion of forests to other land uses, agricultural employment, non-farm income, and through the effects of economic growth. But many others will remain mired in poverty so long as bad governance and the rights of forest dwellers are ignored.

Violent Conflicts in Forest Landscapes

Violent conflicts are one of the strongest manifestations of governance failure, and they frequently occur in remote forest landscapes. Poverty, ethnic tension, the abuse of human rights, competition for natural resources – all these factors exacerbate tension and make conflict more likely. One recent estimate suggests that almost 9% of the world's dense forest, mainly tropical, is located in areas that experienced armed conflicts between 1990 and 2004. These forests are spread over 28 countries and are home to almost 130 million people. Africa has the most forest at risk, while Asia counts the highest number of people living in forested conflict zones.

Forests frequently provide shelter for belligerent groups. For example, during the 1980s and 1990s, rebel groups like the Khmer Rouge in Cambodia and the Revolutionary United Front in Sierra Leone used forests as a place to hide. Forest lands have also provided natural resources such as timber and diamonds for groups conducting armed conflict. 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. Deforestation and forest degradation – for example, by the conversion of land to agriculture by migrant groups or agribusinesses – increases the risk of both violent conflict and human rights violations.

There is a very real risk that sustained poverty, and a failure to recognize and clarify rights to resources and political access, will condemn a significant portion of the globe to open conflict and chaos over the next decades. At the same time, however, there are real opportunities to reduce conflict by improving governance in forest areas, tackling corruption and clarifying the rights and obligations of local communities in forest areas.

Forest Conservation and Forest Refugees

The future of the world's forests is inextricably linked with the fortunes of millions of the world's poorest people. Over a billion people, surviving on less than US\$1 a day, live within 25 of the 35 global biodiversity hot spots identified by Conservation International. Conservation policies, with their strong emphasis on creating protected areas, have frequently made matters worse for the rural poor, depriving them of their basic needs and the means to make a living. This has led to conflict and undermined conservation activities.

Over 12 percent of the Earth's land surface is now formally set aside as protected areas (perhaps one-third of this is actually successfully protected). Conservation policies have persistently overridden the rights of indigenous people and other forest-dwellers to own, control and manage their lands. This is a worldwide problem, and there may be over 100 million "conservation refugees" – people either evicted from their land to make way for wildlife or, more commonly, finding that the legal status of land under their feet has changed, and now dispossesses them. It is time for conservation agencies to look again at what has become an undemocratic and unjust model for conservation.

Experience suggests that communities can play a key role in managing biodiversity and restoring degraded resources. It is estimated that forest communities already invest at least US\$2.5 billion purely on the conservation of forests – more than double the sum invested by international organizations - though they are of course investing in local, not global conservation values.

Local development needs will conflict with global conservation needs at times. But global wishes should not always win, and when they do, much more substantial and permanent livelihood alternatives need to be found for those who lose access to livelihood assets they enjoyed before. In summary, conservation on the cheap, at the expense of poor people, has to be seen for what it is and brought to an end.

Forests and Economic Growth

According to economist Paul Collier, around one billion people– one-sixth of the world's population – are living and dying in 14th century conditions in 58 countries that are “falling behind and falling apart.”^{vi} One-half of these “Bottom Billion” countries are forest-rich, with a third or more of their territory classified as forest, and their per capita income is less now than it was in 1970. Indeed, economic growth in the forest-rich developing countries has lagged significantly behind that of countries with little forest cover.^{vii} Between 1974 and 2005, average GDP per capita growth in forest-rich countries in Africa was -0.6 percent, compared to +0.9 percent in forest-poor countries. Similar trends can be seen in Latin America and the Caribbean.^{viii}

Conventional wisdom among development economists is that these countries suffer from a “resource curse” or “trap”: low economic growth and poverty is due to a variety of factors, including disincentives for the development of the manufacturing and diversification of exports – the “Dutch disease” that comes with exports of primary commodities – the mismanagement of the profits from natural resources, conflict, poor governance and isolation.^{ix} Even countries that are making good progress – China and India being the most obvious examples – are cleaved in two, with rural areas falling far behind urban and coastal areas in terms of economic development.^x The story is repeated in Latin America, particularly for Indigenous Peoples.^{xi}

More tellingly, many developing countries that have export-oriented, industrialized models of forest development, perform disproportionately worse than other forest-rich countries and their own economic peers, on measures of governance as well as economic growth. Eighty-one per cent – that is, 27 out of 33 producer countries that are members of the International Tropical Timber Organization – are more prone to political instability than countries with similar levels of income. The rule of law is not widely respected in 72 per cent of these countries and 70 per cent have a higher corruption rate than other non-forest countries within the same income range.^{xii}

This challenge of allowing and enabling social and economic development in forest areas raises the question of appropriateness of the development models promoted by governments and the approaches employed by development organizations. Development assistance in the forestry arena began in the early 1950's, and while it has always held a fairly minor role in the overall ODA portfolio, more important than actual levels of investment, development assistance is often most influential in that it can provide legitimacy to country-level initiatives. In the beginning this assistance promoted export-oriented forest-based industry – a model that continues today in the form of industrial concessions and the export of primary commodities – logs and lumber.^{xiii} This model is now well established in national policy and legal frameworks and continues to receive support from the international financial institutions. There are some 50 million hectares of concessions in Central Africa alone today.

A recent review of economic history and research evidence on this issue concluded that escape requires steady diversification of exports and strong investments in the knowledge creation, institutional reforms that encourage widespread innovation and new industries to emerge and prosper as market conditions shift.^{xiv}

IV. The Way Forward

The world is facing daunting, inter-linked challenges – among them, continuing deprivation of rights, high levels of poverty, growing conflict and violence, threats to forest biodiversity, and global warming. The costs of failing to address these challenges soon, and successfully, cannot be overstated. In the coming decades, billions of dollars will be spent by governments and the private sector for energy, food, and climate related projects. Yet unless proactive steps are taken, most will dodge, if not undermine, the central development challenge facing these areas: how to repair a dysfunctional structure of forest governance.

In spite of the high level of peril we face, the opportunities for impact and effectiveness have never been greater for the global development community to help create a better world. This new global opportunity to face down and deal with this challenge rests with new positive developments upon which organizations can build:

- Perhaps most important, local people are organizing and strengthening local governance structures around the world, gaining increasing capacity to take charge of their destinies. This means that development organizations can provide more direct support and attention to these voices and organizations, rather than relying as much on NGO, government or other intermediaries.
- Governments are beginning to recognize indigenous and other local communities' tenure rights, reform regulations and decentralize authority. Although poor governance and corruption are grave problems in many countries, the antidotes to these ills – democratic openings, transparency and a freer press – are beginning to take root in some countries where they were unthinkable decades ago.
- Forest markets are providing new opportunities for small-scale producers and some large private enterprises have committed themselves to corporate social responsibility or seeing the market logic of partnering with communities and smallholders to supply products and services, blazing a trail that others can follow.
- There is new thinking and soul searching among the leaders of the conservation movement regarding the appropriate strategies to balance man and nature, and multi-lateral and bilateral donor organizations have placed strengthening of rights and tenure high on their agenda as a way to reduce poverty, reduce conflict and violence, stimulate economic growth, and improve stewardship of resources. There are a growing number of voices advocating sustainable use of the planet's resources and more respect for fellow human beings and nature.

Building on these developments, and seizing the opportunity for more effective aid will require more active engagement by the wide range of stakeholders in forest issues – governments, private companies, donor organizations, research institutions, NGOs, and members of wider civil society. All of these entities play important roles in establishing the fundamental conditions for local people and their governments to find lasting solutions to their national and global challenges. Here we offer some ideas on what these roles and actions might be.

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