

Transitions in Forest Tenure and Governance: Drivers, Projected Patterns and Implications



Transitions in Forest Tenure and Governance: Drivers, Projected Patterns and Implications for the Global Community

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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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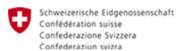
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Table of Contents

Abstract	5
I. Introduction	6
II. Global drivers shaping forest tenure and governance	6
2.1 Shifts in the global economy	
2.2 Shifts in social and political systems	
2.3 Shifts in ecological systems	
III. Forest tenure and governance: Possible patterns by 2020	
3.1 Whither forest tenure?	
3.2 Whither forest governance?	16
IV. Implications for advocates of forests and livelihoods	
4.1 What to do?	18
References	20
List of Figures	
Figure 1: Share of Global GDP, 1975, 2005, 2050	7
Figure 2: Convergence of Food and Fuel Markets	8
Figure 3: Proportion of people living on less than US\$1 a day in 1990, 1999 and 2004 (%) \dots	11
Figure 4: Tropical Countries Affected by Conflict in the Past Twenty Years	12
Figure 5: Sources of emissions from global land-use change	13

Abstract

Forest tenure and governance will continue to be strongly influenced by growth in the global economy, shifts in social and political systems, and rising concerns over impending ecological change. This paper briefly presents our perspectives on major drivers shaping forest tenure and governance, some projected patterns to 2020, and the implications of these transitions for forests, forest peoples, and those concerned with forest livelihoods and conservation today.

In short, we find that the cumulative effort of these social, political and market trends will be heightened threats to the rights and livelihoods of rural and forest people and increased the likelihood of conflicts. At the same time, there will be increased opportunities for improved well-being, expanded recognition of human and civil rights, and greater local voice in development. Promoting tenure and governance reforms will be of key importance, and essential to improve these outcomes. Many activities and changes will be required, including better and broader dissemination about tenure and governance reforms, information on lessons learned and technical assistance to those implementing reforms, shaping global climate regime and funding mechanisms to support local rights, and ensuring funding to finance reforms.

I. Introduction

Major shifts in the global economy and in social, political and ecological systems are affecting forests and forest livelihoods in such a way that future challenges in the forest sector will be quite distinct from those faced in the past. The forest sector is now much more embedded in the global economy than ever before, and in the next few decades the influences of other sectors will continue to magnify the impacts on forests, forest peoples and forest governance.

This paper briefly presents our perspectives on: (1) the major drivers shaping forest tenure and governance; (2) projected trends to 2020; and (3) the implications for those concerned with forest livelihoods and conservation.

Despite important steps toward forest conservation over the last few decades, the global forest estate is still characterized by unclear and contested property rights, disenfranchised and poor indigenous and local peoples, corruption, and boom-bust industrial models of unsustainable exploitation. Rather than a linear continuation of progress forward, global trends suggest a fundamentally altered forest sector in coming decades. This will pose dramatically different challenges to donors, governments, and activists. As globalization reaches further into remote areas, and countries complete the division and allocation of state-claimed resources, different models of forest governance will be required. Yet these changes are not necessarily imminent, and the global forest community should make best use of the period between now and 2020 to lay the institutional foundations for creating sustainable livelihoods and forests, before the more challenging decades ahead.

II. Global drivers shaping forest tenure and governance

Forest tenure and governance will continue to be strongly influenced by growth patterns in the global economy, shifts in social and political systems (and the differentiated responses of constituencies and governments), and rising concerns over impending ecological shifts. Here we briefly identify key emerging drivers in these areas and consider the implications for forests, forest governance and forest peoples.

2.1 Shifts in the global economy

Growth of the BRICs and relative decline of western influence

Over the next 50 years, Brazil, Russia, India and China—the BRIC economies—will become a much larger force in the world economy. As a whole, the world economy will continue to grow at record pace—global GDP is projected to increase from \$55 trillion to \$80 trillion by 2020—and many projections place the BRIC economies with an increasingly large share. According to the landmark 2003 analysis by Goldman Sachs, in less than 40 years the BRIC economies could be larger than the G6 (in US\$ terms) and by 2025 they could account for more than half the size of the G6 economies. More recent estimates show that by 2050, emerging economies will account for as much as 78% of global GDP, and the BRIC economies alone will constitute 44% of global GDP (see Figure 1, next page.)²

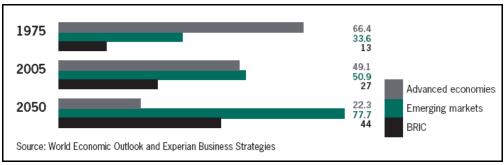


Figure 1: Share of Global GDP, 1975, 2005, 2050

Reproduced from: Grant Thornton International. 2007. International Business Report 2007: Emerging Markets.

These tremendous market shifts are already influencing economic and political landscapes, and the continuing trends could significantly reshape political influence and business practice. If the projections are correct, the new investors emerging from the BRICs and other middle-income countries will diminish the unilateral influence of the previously dominant Western economies, bringing new values and creating new rules of the game. Patterns of investment, standards for business practices and ethics, multilateral legal and implied commitments, social and environmental obligations, and the influence of Western lobbies—all may well undergo profound changes, with significant repercussions on markets and investment trends. As these emerging economic powers exert growing influence on the global economic and financial systems, the reverberations of their policies and actions will be felt far beyond their geographic and sectoral borders.

These shifts have two key implications relevant to forests. First, there will be many more industrial and political players, and this greater and more dispersed set of actors will make it much more difficult to identify and influence markets and business practice, particularly because in the near term this growth will occur in countries where information and transparency remain limited. Second, new economic players will bring to the table an entirely different set of cultural, social, political and operational contexts which will exert new influences on industry practices and business standards. It may be that future industry, forestry in particular, will not adopt or adhere to initiatives based on Western standards and values, including corporate social responsibility initiatives like certification and the Equator Principles. Thus these approaches used today may be less relevant and powerful tomorrow.

Growing demand from developing economies, with Asia in the driver's seat

Economic growth and wealth creation in developing economies—coupled with increased consumption and continued population growth—will have a substantial impact on demand for commodities in the coming decades, in turn increasing pressure on natural forests and landscapes. The economic and population growth in the BRICs and middle-income countries comes will lead to an increase in demand for energy, agricultural products, water, forest products, and other basic commodities for both internal consumption and the production of finished products for export.

By 2020, global demand for food is projected to double, as is demand for specific agricultural products like palm oil, implying a serious increase in competition for land and in pressure on natural forests.³ In this same period, demand for meat is expected to increase by 50%. The increase in livestock will have disproportionate impacts on forest and agroforestry landscapes: multiplying demand for livestock feed and exacerbating land pressures, and multiplying production of methane from livestock—a greenhouse gas more potent than carbon dioxide.⁴

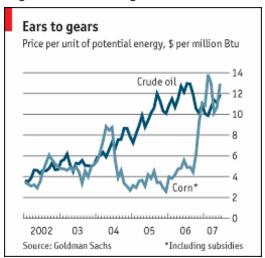


Figure 2: Convergence of Food and Fuel Markets

Reproduced from: The Economist. 2007. *Agricultural Commodities – Biofuelled: Grain prices go the way of oil price.* June 21st 2007.

The growing role of Asia will be particularly important. In 2005 alone, China and India accounted for 24% of the world's consumption of palm oil. 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. Though this recent exponential increase in demand prices will not continue indefinitely, the general trend of strong growth in Asia will continue in the near term and will ultimately magnify the effects of economic growth of Asia on the world's rural and forested landscapes.

Similarly, while the global economy is expected to double in the next three decades, global trade is expected to triple in this same period. Despite general increases in energy prices, transportation costs will remain relatively low as a result of the increasing size of ships and more efficient shipping infrastructure. This "deepening" of globalization will strengthen the effect of global prices on all basic commodities, continuing the downward pressure on local prices from more efficient producers elsewhere.

The implications of increased demand and growing trade in commodities are stark. First, the opportunity cost of forest land will rise as alternative industrial land uses become increasingly lucrative, pushing forward the frontier of forest conversion and increasing the pressures and threats to indigenous peoples and forest communities. Second, these demands will be felt despite distance and geographic location, exerting land and market pressures across the world wherever productive natural assets are located. Third, there will be greater pressures put on forest lands for exploration and extraction of energy, and growing tensions and conflict over subsoil resource rights for water and energy.

Two recent events—a cooperation pact to secure energy supplies between China and India, and the Saudi King Abdullah's visit to the two countries—show how the rising demand for natural resources by China and India will shape world economic and financial markets.⁸

Energy: Big changes, huge impacts

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

By 2030, demand for energy is projected to increase by 50%, and demand for oil alone may increase by 40%. Alternative energy sources, including biofuels, are becoming progressively more important but

their relative importance remains uncertain. Despite much recent buzz, a significant switch to these fuels will be incremental, due to constraints of infrastructure and the tremendous investment required to adapt existing fuel and transport infrastructures. This is unlikely to happen on any large scale until soaring prices for traditional fuel and modes of transport provide sufficient incentive. Nonetheless, even these incremental shifts will have 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 concerns over "energy security" will be another key dimension that affects economic and political affairs, with a likelihood of increasing conflict over energy—as we have seen in the Arabian Gulf and more recently in Eastern Europe. Speculation over both biofuels and alternative energy sources and supplies is likely to expand and distort markets for land and commodities.

Biofuels could be either a major positive or a major negative force for forest landscapes and forest owners. Biofuels made from forest products could increase the value of forested land and help promote sustainable management. On the other hand, biofuels from other plant matter such as switchgrass, grown as crops, could create yet another competing land use putting pressure on forests. Furthermore, growing demand for biofuels is already competing with food production and exacerbating food security

issues, hunger, and inequities between rich and poor. For example, ethanol production in the United States—based almost entirely on grains—is growing dramatically, with plans to add 78 new plants (a 72% increase). In late 2006, demand for corn-based ethanol soared, creating a rapid rise in corn prices and thus tortilla prices in Mexico and similar protests erupted in Italy in 2007 over the price of pasta—good examples of the web of linkages between biofuels and food, and the vulnerability of the poor—both the producers and consumers of food—to shifts in the energy markets. Indeed,

Markets for food, fuel and fiber will increasingly converge...increasing pressure on forest lands and exacerbating food insecurity, inequality and conflict.

some analysts now predict major food riots and conflict unless the food and energy markets are delinked. ¹¹

The trend is clear and the wide-ranging effects on food security are already apparent: in twelve ethanol-crazed months between 2006 and 2007 corn prices in the US increased 43%, pushing up all food and beverage prices an average of 3.6%. Beef and poultry prices were almost 5% higher, milk 3% higher, and the prices of eggs rose by more than 18%. As these trends amplify and biofuels compete for land and agricultural products, markets for food, fuel and fiber will increasingly converge and compete for the same land, increasing pressure and speculation on forest lands and exacerbating food insecurity, inequality and conflict.

Forest industry and trade: from North to South

These shifts and trends in other sectors will affect the forest sector in significant ways, yet the sector itself is not static, and industry and production patterns will also continue to define forest sector shifts. Key among these transitions are the strong growth in domestic demand for forest products in developing countries (relative to the more mature western markets), increased supply from industrial plantations, the increasing integration of small and medium producers in national and regional market chains, the growing possibility that cellulosics and other emerging technologies will expand, and the potential expansion of certification and standards, such as the European Union's Voluntary Partnership Agreements.

Implications for tenure and governance will be mixed. Growing domestic demand will provide increased market opportunity for local producers, and this will create incentives to secure and invest in natural forests. Yet the expansion of the plantation sector will continue to threaten the land rights of indigenous peoples and local communities and it will continue to put strong downward pressure on the prices of pulp and paper. In some cases, the plantation sector may provide opportunities for local producers in specific situations. As long as certification and corporate social responsibility standards remain significant and

relevant, they may continue to drive a wedge between small domestically-oriented producers and the larger (currently Western) industry that can bear the additional costs.

The integration of small producers in domestic supply and marketing chains (i.e., in local versions of "Wal-Mart") is already underway in some areas of South America. This process will yield some benefits to producers, but will simultaneously make them more vulnerable to market shifts and more dependent on fewer buyers. It will reduce their market leverage.

A major question in predicting future trends in the forest industry is whether there may be a rebound in forest fibre supply, from South back to North. As the social and economic costs of establishing plantations in the South increase, Northern forests and other natural forests may become financially more attractive, potentially increasing the incentive for investments in their governance.

2.2 Shifts in social and political systems

Declining (relative) authority of central governments

Public authority is shifting both from central government to local bodies (decentralization) and from government to private and civil society (devolution). More than three fourths of developing countries are now undergoing decentralization and devolution processes. This trend implies a further dispersal of authority—creating the potential for more local empowerment, but also challenging national governance and making it more difficult to develop and maintain national policy and to track and influence policy makers.

At the same time, urbanization is increasing at a rapid pace. Twenty-three cities are expected to have populations of ten million or more by 2015. Nineteen of these are in developing countries. ¹⁴ The rise of these mega-cities around the world could create a return to the politics of city states, where decisions in urban areas are more influential than national governments (with relatively more equal representation) in driving markets and land use in rural areas. This even stronger imbalance in decision-making authority and power could threaten the local rights and authorities of rural and forest peoples over their own lands.

At the national level, these trends parallel a decreasing importance of international and intergovernmental arrangements in some spheres, replaced by the rising influence of civil society and informal networks across the world. Examples include the relative decline in global relevance and influence of the UN Forum on Forests, the FAO, and the World Bank. These institutions have and will maintain a high degree of relevance on some issues and in some smaller countries, but on the whole their relative influence will continue to be mediated by the influence of independent standards and monitoring systems, the increasing role of local agreements and civil society pressures, and more questioning of government legitimacy by those who feel that their rights are not being upheld.

Increased access to information, transparence and empowerment

A second major social and political driver of forest tenure and governance is the rapid expansion of telecommunications and political transparency particularly in well-populated developing countries. By the end of 2006 there were an estimated 2.4 billion mobile phone users worldwide, almost 60% in developing countries. Though access to new, inexpensive and efficient communication technologies is still far from universal, expansion is rapid and the trends are clear. For example, in April 2007 the One Laptop Per Child Foundation launched sales of its low-cost laptop in developing countries, initially at \$175 each with a goal of \$100 a laptop. This has spurred investment in a similar low-cost laptop aimed at developing markets from Intel, and companies like Visa and many mobile networks are actively pursuing opportunities to provide services to the so-called "bottom of the pyramid" markets. Accompanying these important trends in technology is the expectation of more transparent government processes and greater access to public information. More than 70 countries have implemented some form of freedom of information legislation since 2006. 16

These trends will eventually result in a much wider set of people with an increasing quantity of information and with access to a growing range of media. Mapping information and technology will become increasingly available and accessible, particularly with the advent of lower-cost GIS and GPS systems and web-based mapping applications. Automated translation options are becoming faster and cheaper, even as English is spreading as the lingua franca—spurred by the speed of telecommunication, the internet, and media globalization.

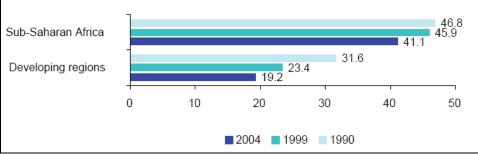
These shifts will imply a greater ability to hold governments accountable and to mobilize wider support, bringing empowered local community voices in direct confrontation with entrenched economic interests. In many parts of the world, indigenous and ethnic groups will be able to take advantage of this information and access to press for rights, recognition and reconciliation of historic wrongs.

Continued poverty: more pain and peril

Despite the forecasted growth of the global economy and the increased pace of urbanization, it is clear that even in 2015 widespread poverty will persist, especially in remote rural forest areas. Few analysts and policy-makers expect the world to meet the Millennium Development Goals in the timeframe originally promised.

In 1990 over 1.2 billion people, more than 28% of people in the developing world, lived in "extreme" poverty—on less than one dollar a day. Progress to alleviate poverty is slow and uneven across regions, with particular improvement spurred by economic growth in Asia, but there has been a serious lack of progress in most African countries (see Figure 3, below). In Africa, extreme poverty declined by 4.8% between 1999 and 2007, yet to reach the MDG target and halve extreme poverty by 2015, the pace of poverty reduction needs to be nearly double this rate. And while there have been great gains in diminishing poverty in China and some other Asian countries, even in these countries the rural and forest areas are being left behind. The continued and growing disparity in wealth and economic growth between urban and rural areas is a global phenomenon.

Figure 3: Proportion of people living on less than US\$1 a day in 1990, 1999 and 2004 (%)



Reproduced from: United Nations. 2007. Africa and the Millennium Development Goals: 2007 Update.

As long as poverty, severe inequality and continued powerlessness persist, many people will suffer, with implications for many other major trends considered here. Poverty and inequality will continue to fuel unrest, conflict, migration and urbanization in many parts of the world, in many cases intensifying threats on forest peoples and pressures on forest lands.

Continued Threat and Changing Nature of Violent Conflict

In the past twenty years, 30 countries in the tropics have experienced significant conflict between armed groups in forest areas (see Figure 4, next page.) ¹⁹ And much if not most of this conflict is strongly linked to poverty and insecurity of access to resources.

Armed conflicts in the forest are often, though not always, a product of limited or contested rights—human rights, civil rights, or tenure and property rights. Logging is often cited as a means to finance violent conflict. Further, growing population pressures on increasingly scarce natural resources exacerbate stressful local relations and political situations. Rwanda is an extreme example of the effects of heavy resource pressures from a diverse and growing population, and the absence of alternative sources of land or livelihoods.²⁰

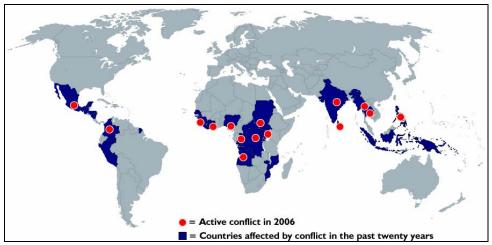


Figure 4: Tropical Countries Affected by Conflict in the Past Twenty Years

Data from CIFOR. 2007. Fact Sheet on Forests and Conflict.

Informal alliances facilitated and sustained by better and cheaper communication will also change the nature of local conflicts. Protests that were once easily suppressed will no longer remain isolated. Connectivity will ensure that others affected by similar problems can join forces, expand the geographic scope of their campaigns, magnify the political stakes of inaction and force governments to respond. Indigenous and other disenfranchised groups will be able to use external alliances to leverage media and political attention and protect themselves from reprisals.

Despite the positive influences that new access and ease of communication will bring, combined with a lack of rights, persistent poverty and conflict, these new tools and abilities will result in parts of the world continuing to endure open conflict and relative unrest.

Increased Migration and Urbanization: New (and more) Constituencies

Though the level of rural population is expected to remain stable over the coming three decades there will be continued, and increased, urbanization – changing the nature of political and market constituencies, and thus forest governance.

In 2000, 47% of the world's population was urban, and current trends project that 60% of the world's people will live in urban areas by 2030. National politics will increasingly be dominated by urban interests. By 2020 there could be 2 billion slum dwellers globally - a growing, and perhaps more demanding political force, distracting attention away from rural areas. The rise of these mega-cities will alter resource consumption and political realities in many developing economies. Decision-making may begin to reflect a more pronounced urban-bias, and there may be declines in interest and incentive to

invest in rural governance and economic viability. Tourism may increase as an income stream for rural peoples, as rural areas become a vacation refuge for wealthy urbanites in lesser-developed and middle income countries – a shift that is already underway in the US and other developed economies.²³

Another important shift affecting rural governance is private financial remittances. As urbanization, interregional and international migration increase, remittances to rural areas are likely to become the dominant development mechanism. Remittances increased by \$US 20 billion in 2005 alone, doubling since 2001 and reaching \$US 200 billion in 2006.²⁴ Already, remittances are much greater than Overseas Development Agency in many countries in Latin America, further challenging the power of governments and inter-governmental agencies to steer and control development.

2.3 Shifts in ecological systems

Climate change: More heat and more uncertainty

Social and ecological systems will face serious adjustments to climate change. Forest systems in particular are integral to the climate system. Changing land use accounts for 18-20% of global greenhouse gas emissions, the overwhelming majority of which come from deforestation and changing use of forest lands (see Figure 5). As this is a significant cause climate change, reforestation and avoided deforestation must be part of the solution.

The Stern Review in particular has provided new, robust estimates for the implications and threats posed by climate change, galvanizing Western governments and encouraging the debate on climate mitigation. A new urgency to act is spreading worldwide, and in many countries the political will to act has become a reality, increasing the opportunity. However, this brings with it the risk of poorly targeted projects.

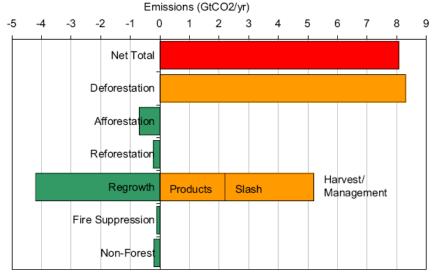


Figure 5: Sources of emissions from global land-use change

Reproduced from: Stern 2006. The Stern Review: The Economics of Climate Change.

Climate change is already having significant impacts on forests and this is now focusing the attention of governments and citizens like never before. For example, in 2005, the Amazon had an unprecedented drought. Pine beetle infestations have destroyed more than 8 million hectares of forests in British Columbia and are worsening throughout western Canada and the United States (winters are not cold enough to kill larvae), and wildland fires in the US have doubled in the past 40 years.²⁵

The implications of climate change for forest tenure and governance are many and diverse. To begin, forest peoples and the poor who depend on forests and other natural resources will be among those

most exposed and most vulnerable to catastrophic events, including changes in weather, rainfall, vegetation, and the distribution of wildlife populations. According to the Stern Review, average mean temperature increases of 1-2°C could cause extinctions of 15-40% of species and force millions of people into extreme poverty—with up to 220 million more people living on less than \$2 per day in South Asia and sub-Saharan Africa. These are the same people who have limited and insecure rights to their lands, forests and other natural assets. Climate change is likely to spur increased migration, and thus increase conflicts between local people and immigrants – in addition to making it increasingly difficult for the already established populations to adopt production systems that can reliably improve their incomes.

This growing global concern is generating a flurry of ideas and initiatives, all likely to pose varying levels of threat and opportunity for local people. There is, however, a degree of uncertainty regarding the long-term effects of these initiatives. An example is the recent proposal to "buy" portions of the Amazon, thereby "protecting" the forests from deforestation (and also from the sovereignty of local peoples and national governments.) Such ideas and initiatives will set legal and market precedents that, once established, will be difficult to change. Increased concern and fear will accelerate the number and ambition of ideas and initiatives, making the recognition and strengthening of local property and civil rights an even more important priority.

A third important implication is that concern about climate change is bringing central governments back to the table in the climate and forest debates. The concept of "avoided deforestation" is now being actively considered and governments are beginning to develop national responses – establishing new institutions and legal frameworks to manage this issue across their territories. This shift is occurring even in the US, where a national carbon regime is likely to be established within the next five years. It is highly likely that governments will respond with an aggressive global initiative in the near term, as their constituencies demand more responsible action to mitigate climate change.

A related effect will be the desire of environmental groups and governments to extend public regulatory authority across landscapes beyond protected areas - since climate change will force the movement of species and ecosystems, rendering the protected area concept of declining relevance, and at the same time increasing conflicts with local property owners, indigenous peoples and other local communities and governments resistant to additional government regulation of private land use.

The potential change and its impact are huge – as are the implications of a new global climate regime. There is tremendous scope for climate investments to be conducted in a manner that strengthens local rights and reduces rural poverty, and protects remaining natural forests and restores degraded ones, while at the same time bringing about a reduction of carbon emissions. 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, and it identified those challenges as including: clarifying forest-related property rights, strengthening law enforcement, and overcoming entrenched systems of vested interests.

Water: Greater demand and greater uncertainty

By 2025, two-thirds of the world - 5.5 billion people - will live in areas facing moderate to severe water stress. The World Bank estimates that India could run short of water by 2020. Annual global water withdrawal is expected to grow by 10-12% every 10 years. Demand for water will increase by 50% by 2020. The properties of these developments are mixed.

Greater demand and scarcity of water may increase initiatives for financing the improved management and restoration of natural forests for conservation rewards. Then again, greater demand for and scarcity of water, exacerbated by climate change, may increase conflicts, particularly as competing demands for land use for other needs like agriculture and settlement come in direct conflict with the need for water.

III. Forest tenure and governance: Possible patterns by 2020

As outlined above, the demands of a rapidly expanding global economy, partially driven by the BRICs, will put tremendous pressure on land and forest resources for the production of commodities and meeting energy demand. Land and forest-based conflicts are likely to intensify, partially propelled by increased connectivity and political power of rural and forest-based social movements, facilitating the expression of long-held social grievances.

Governments' centralized control of forest and land resources will decline, leading to greater changes in forest tenurial arrangements and greater changes in regulatory regimes that govern forests and forest trade. Formal international arrangements on forests are likely to decline in importance, paving the way for a stronger role of informal arrangements of all types, locally mediated agreements, and independently set standards. At the same time, a more ambitious global carbon regime is very likely to emerge – and this regime could overwhelm and absorb relatively weak forest regimes. A few possible scenarios regarding the effect these drivers will have on forest tenure and governance are given below.

3.1 Whither forest tenure?

Forest tenure has already changed dramatically in recent years – with the amount of forest owned and officially administered by indigenous and traditional communities doubling over the last 15 years. Communities now own or administer at least 25% of developing country forests. The drivers described previously, as well as the new legislation and land reform initiatives underway across the world, suggest that this trend is likely to continue, and the percentage of community-owned forests is likely to double again by 2020. For example, taking 2006 alone, the Indian Parliament passed the "Scheduled Tribes and Other Traditional Forest Dwellers Recognition of Rights Bill," the Government of Indonesia declared that it would allocate 60% of degraded state forests to communities, and the Administrator of the Chinese State Forest Administration declared that strengthening local property rights and reforming the public forest are his first priority.

These transitions are driven by three primary considerations. First, governments are increasingly aware that widespread public ownership discriminates against the rights and claims of indigenous people and local communities. Second, there is an increasing convergence of the economic and environmental agendas. Without secure rights to own and use their assets, indigenous and other local community groups lack long-term financial incentives to sustainably use their forest resources for

The future will bring increased political pressure on governments to recognize and devolve property rights.

their own development. Third, there is growing recognition that governments and public forest management agencies have often been poor stewards of public forest land, that more forest land remains in the public domain than is socially or economically reasonable, and that communities and private households often manage forests as well as or better than public authorities or large-scale industry.

The future will bring continued and increased political pressure on governments to recognize and devolve property rights. However, given past experience, most reforms are likely to be chaotic and incomplete, and unlikely to be combined in parallel with the regulatory reforms necessary for local people to actually benefit – and thus have incentives to invest. Tenure reforms are often passed in response to political pressures largely fuelled by forest communities asserting their rights, but they are seldom accompanied by rights to use these newly owned assets - initially, at least. Substantial regulatory reforms directly conflict with existing and well-entrenched industrial interests, which tend to be difficult to dislodge. Governments are often caught between two contradictory pulls and they resort to muddling along to "get it right", especially with issues as politically contentious as property rights and citizenship.

We therefore expect substantial "progress" in the recognition of local ownership and administration of forest land by 2020, and that progress on reforms in regulations controlling access and use is likely to

lag. Local ownership rights are likely to continue to be de-linked from rights of benefit and use, fuelling conflict with governments and continued, unsustainable exploitation.

3.2 Whither forest governance?

Emerging patterns in governance are likely to respond to two contradictory pressures. One will reflect the new connectivity and the tighter organization of communities, decentralization processes, and related recognition of local rights and authority, which will enhance incomes of peoples hitherto untouched by global economic growth. The other pressure will come from a tremendous increase in demand for commodities and energy, combined with climate change, and changing business rules and players. These will increase pressure for forest conversion and expose smallholders to an ever more competitive and often unfair market. The implications differ at various levels of governance. Some possible scenarios include the following:

At the national level:

- Decentralization. Trends in decentralization of governance will continue, partially due to perceived failure of centralized systems, but also in response to demands from local governments and communities. Greater access to information and connectivity will force more accountability and transparency in government. Entrenched economic interests will blur progress, maintaining existing regulatory regimes that impede community progress.
- Empowerment, rebellion, conflict. Those regions lagging in the process of tenure reforms and decentralization will witness greater organized resistance from people—heightening the possibility of increased armed conflict and social tension. Tenure reforms are a priority for "post-conflict" countries like Liberia and Mozambique, and combined with civil rights can reduce or resolve social and political conflict.
- National economic priorities. National-level (and increasingly nationalistic) concerns and ambitions to capture commodity markets and energy supplies will put greater pressure on forest and agroforest landscapes. These "national imperatives" will collide with the aspirations of remote rural forest communities, and provide more fuel for social tensions, all of which will be even more difficult to control because of the more dispersed and more difficult to control industrial sector.

At regional levels:

The current movement towards regional trade agreements will continue, with countries making agreements with producers to address needs for commodities, improve their position in the global economy, and establish more local standards for business and social responsibility relevant to their circumstance. Civil violence from one country will threaten to spill into others and social movements will increasingly mobilize across borders.

At the international level:

Possible conflicts may emerge between population-rich and resource-rich countries. For example, growing demand for commodities and energy in China and India is propelling expansion to Latin America and Africa as markets for manufactured goods and suppliers of raw material.

Conflicts may emerge between world leaders who dominate in the current economic model, and rising economic powerhouses, particularly between China, India and Brazil and the West, as rising economic powers challenge competitiveness and dominance of the old guard.

At the level of international and intergovernmental institutions:

The Rio conventions will increasingly be shaped by human rights issues, macro-economic trends, and commodity demands and pressures.

With new economic drivers, proliferation of markets and information, and greater participation by communities and social movements, intergovernmental forums will have less and less influence in response to: (a) private capital moving faster than governments can control it, as net exporters are becoming net consumers and investors; (b) domestic markets becoming increasingly more important than international trade; (c) industrial production shifting to developing economies outside the Western sphere of influence, generating more regional agreements based on regional values; and d) declining willingness of citizens and society to accept solutions crafted, if not imposed, by global forums.

Globalization, paradoxically, has shrunk the Western sphere of influence and has fostered a decline in the value and usefulness of the existing stock of (Western-precipitated) international protocols. More regional agreements, informal consultations on common issues, and the joint pursuit of resources are becoming more common. The regional and informal arrangements will propel and shape the next generation of international architectures governing various global resources, including forests.

Forums like the UNFF are likely to survive, not because they resolve issues but because officials within governments will want some intergovernmental mechanisms to enable the exchange of information. As the influence of many international and intergovernmental institutions diminishes, global protocols, specific forums and advocates will need to become more responsive and more collaborative. Specific forums like the Committee on Forestry (COFO) and other mechanisms that allow the informal exchange of information among governments are likely to grow stronger, especially to provide better mechanisms for exchanging information and lessons learned to help governments better position their own policy and implementation arrangements. It is unlikely that world leaders will wait cannot afford to wait for international agreements to reach consensus in the face of new and intensifying challenges like civil conflict, climate change, changing pressures on resources and populations, and a rapidly changing global marketplace. Instead, actors are likely to turn to more effective mechanisms and forums that address these issues at more specific and relevant levels and timescales.

Despite these trends, it is very likely that a more robust, expansive and ambitious global climate change regime will emerge. Since such a regime is likely to channel significant funds and rigorous sanction mechanism, this regime could become the leading international instrument affecting the fate of forests and forest peoples.

IV. Implications for advocates of forests and livelihoods

The over-arching implication of these trends is that by 2020 the forest sector could encompass two sharply contrasting models of use and development. The dominant model – largest in terms of number of hectares, forest-dependent people and production, will be the more chaotic, with loosely-defined property rights and judicial infrastructures. It is likely that this larger and chaotic model will be more driven by domestic agendas and emerging markets in developing countries, rather than international agreements or models like sustainable forest management (SFM).

The remainder of the forests and forest production will be more "modern" and "legal" – but will be largely limited to the Western world and small enclaves of industrial plantations devoted to fiber supply. Existing arrangements and approaches in the forest sector are by and large designed to advance this small controlled model, but they may be largely ineffectual in influencing the other.

However, without significant local and regional action and intervention in the climate regime, the forest sector in 2020 may appear only incrementally different from today. The more fundamental shifts will occur in the decades following, when the BRICs and today's developing economies fully dominate global markets and intergovernmental politics (and thereby trade and governance), and when climate change

and rural conflicts challenge the ability of any governance structure to effectively manage forest landscapes. These challenges put the period between now and 2020 in sharp relief – as an opportunity to make substantial headway establishing the institutional foundations that can better accommodate conflict and change and enable development, before the scale of the challenge becomes much greater.

To change this basic scenario, the development community will need to be more aware of the fundamental role of tenure and governance in fostering both conservation and pro-poor economic growth. And all will need to be much more proactive in engaging and creating investment by the development community in these arenas. The impending climate regime, and the associated convergence of the food, fuel and fiber markets may provide a window of opportunity to advance these goals.

A particular political and operational challenge will be to engage the leadership and new constituencies of national governments and mega-cities in the developing world to: (1) reject the entrenched elite interests now controlling the forest landscape and industry; and (2) make the necessary investments to establish equitable property rights and governance structures in their forested hinterlands. Some countries will be able to successfully muster the leadership to "manage" these tensions and transitions and make these investments, but others will be less successful and succumb to the status quo. Substantial finance from the North to compensate forest owners and dwellers for the provision of global pubic goods, such as carbon sequestration, or for investment in pro-poor business models, would have dramatic impacts, if not be required, in order to shift dominant incentive structures.

Making substantial progress will require advocates for forests and livelihoods to increase their focus on the politics and markets of developing countries, and on the BRICs in particular. The development community must also become more attentive and nimble in engaging and supporting the civil society and social movements who increasingly shape the direction and effectiveness of policies. In parallel, advocates will need to become more engaged in encouraging (and assisting) governments to effectively devise and implement land and land-use reforms, as governments become open to learning about and acting on these issues.

In order to enact significant change across the world, advocates will need to work with and through informal social networks and to take advantage of new telecommunications technologies. There is a clear need to assist decision-makers, at the community, national, and international levels, helping them link to other decision-makers, distilling lessons on the nature and pacing of tenure and governance reforms, and helping them to analyze scenarios pertinent to their economic and socio-political situation. There is also a need to enable social movements and civil society actors to exchange information and lessons, so they can more constructively engage governments in a dynamic global framework.

4.1 What to do?

It would be easy to look forward and imagine a bleak future, one characterized by further forest decline, social unrest and political upheaval as the rural poor seek to redress the historic wrongs they have suffered. Throw in the impact of climate change, and the future could look even more daunting. However, it needn't be like this. We have the chance to bring about real change which will benefit both forest peoples and the environment in which they live. The window of opportunity may be relatively brief, so now is the time act.

If we are to avoid a bleak future, these are some of things we need to do:

- 1. There is now plenty of evidence to show that secure rights of tenure and good governance can play a key role in alleviating poverty and improving forest management. Governments should be encouraged to strengthen local ownership of land and rights of access, especially in heavily forested poor countries
- 2. Every effort should be made to share existing experiences about the importance of tenure and good forest governance, and share the lessons learned in countries and places which have introduced forestry

reforms and experimented with decentralization and community forestry. These messages need to be disseminated as widely as possible to encourage governments to introduce the far-reaching reforms which are needed to tackle poverty and ensure sustainable land management.

- 3. Development agencies should be encouraged to invest in programs and activities which enable forest-dwelling communities to take control of their land. In some cases, technical assistance will be required. It is imperative that countries recovering from conflict, and those prone to conflict, are given all help they need, as the inequitable distribution of land is a major cause of conflict.
- 4. Every effort should be made to ensure that the new global climate change regime and other conservation-oriented funding mechanisms recognize the importance of tenure and property reforms. They must ensure that local people are properly rewarded for reducing emissions from forest degradation, and for providing environmental services such as clean water and biodiversity.
- 5. Civil society has a key role to play, not least in creating alliances between governments, the private sector and local communities. Development agencies and governments should invest, whenever possible in local, rather than international, NGOs.

References

FAOSTAT. Accessed December 2006.

¹ Goldman Sachs. 2003. Dreaming with BRICs: The Path to 2050, Global Economics Paper No. 99 (October 2003).

² Grant Thornton International. 2007. International Business Report: Emerging Markets. Brazil, Russia, India, China.

³ IFPRI 2002. International Food Policy Research Institute: Impact Projections. *2020 Vision. Water and Food to 2025.*; and

⁴ Steinfield, Henning, Peter Gerber, Tom Wassenaar, Vincent Castel, Mauricio Rosales, and Cees de Haan. 2006. Livestock's Long Shadow: environmental issues and options. Rome: FAO.

⁵ USDA 2005. Oil; Palm - Production, Consumption, Exports, and Imports Statistics.

⁶ The Economist, 2006.

⁷ Global Prospects, The World Bank, 2006.

⁸ World Economic Forum Annual Meeting 2006, Davos

⁹ The Economist, 2006.

¹⁰ Don Roberts, CIBC. 2007.

¹¹ Runge, C. Ford, and Benjamin Senauer. 2007. How biofuels could starve the poor *Foreign Affairs*.

¹² US Bureau of Labor Statistics, as cited in The Washington Post. June 2007.

¹³ Contreras-Hermosilla, A., H. Gregerson and A. White. 2006. Forest Governance in Countries with Federal Systems of Government: Lessons for Decentralization, CIFOR and Rights and Resources Group.

¹⁴ World Bank, 2001. Urbanization & Cities: Facts and Figures.

¹⁵ Entrepreneurial Programming and Research on Mobiles, Massachusetts Institute of Technology, 2007.

¹⁶ Privacy International. 2006. Freedom of Information around the World.

¹⁷ United Nations. 2007. Africa and the Millennium Development Goals: 2007 Update.

¹⁸ Ravi Kanbor William.

¹⁹ David Kaimowitz, 2003. ETFRN News.

²⁰ James Gasana, 2002. Remember Rwanda? World Watch Magazine.

²¹ World Bank, 2001. Urbanization & Cities: Facts and Figures.

²² EcoAgriculture Partners, 2006. Urban Forum, June 2006.

²³ US Forest Service, 2006.

²⁴ World Bank, 2006.

²⁵ Canadian Forest Service, 2003. United States National Interagency Fire Center, Wildland Fires Statistics. Woods Hole Research Center, Amazon Scenarios.

²⁶ The Stern Review: The Economics of Climate Change, 2006.

²⁷ IFPRI 2020 Vision. Water and Food to 2025. 2002.