

VOICES FROM THE CONGO BASIN: Incorporating the Perspectives of Local Stakeholders for Improved REDD Design

GUY PATRICE DKAMELA, FÉLICIEEN KABAMBA MBAMBU, KEMEN AUSTIN, SUSAN MINNEMEYER, FRED STOLLE

World Resources Institute Working Papers contain preliminary research, analysis, findings, and recommendations. They are circulated to stimulate timely discussion and critical feedback and to influence ongoing debate on emerging issues. Most working papers are eventually published in another form and their content may be revised.

Suggested Citation: Dkamela, Guy Patrice, Félicien Kabamba Mbambu, Kemen Austin, Susan Minnemeyer, and Fred Stolle. December 2009. "Voices from the Congo Basin: Incorporating the Perspectives of Local Stakeholders for Improved REDD Design." WRI Working Paper. World Resources Institute, Washington DC.

Please direct any comments, questions or suggestions about this paper to kaustin@wri.org.

SUMMARY

The scarcity of information on local and indigenous perspectives on Reduced Emissions from Deforestation and Forest Degradation (REDD) may inhibit the development of effective REDD-related measures in the Congo Basin. The World Resources Institute (WRI), along with the Network for Environment and Sustainable Development (NESDA) in Cameroon, and the Council for Environmental Defense by Legality and Traceability (CODELT) in the Democratic Republic of Congo (DRC), engaged underrepresented local communities in the Congo Basin on issues regarding REDD. We conducted a series of workshops with local and indigenous communities, community-based nongovernmental organizations (NGOs), and parliamentary representatives to raise their awareness of forest/climate issues and REDD. The workshop participants then had an opportunity to discuss their aspirations and concerns regarding REDD's design and implementation. Their five main concerns were the following:

1. Limited recognition of land-tenure rights.
2. Inadequate information about forest and carbon resources.
3. Weak institutional capacity and unclear roles.
4. Inequitable revenue distribution.
5. Fewer opportunities for development.

We discussed recommendations for addressing these concerns, and decided on priorities. This working paper summarizes the feedback and conclusions from these workshops for international civil society, UN-REDD, the Forest Carbon Partnership Facility (FCPF), and the parties to the United Nations Framework Convention on Climate Change (UNFCCC).

December 2009

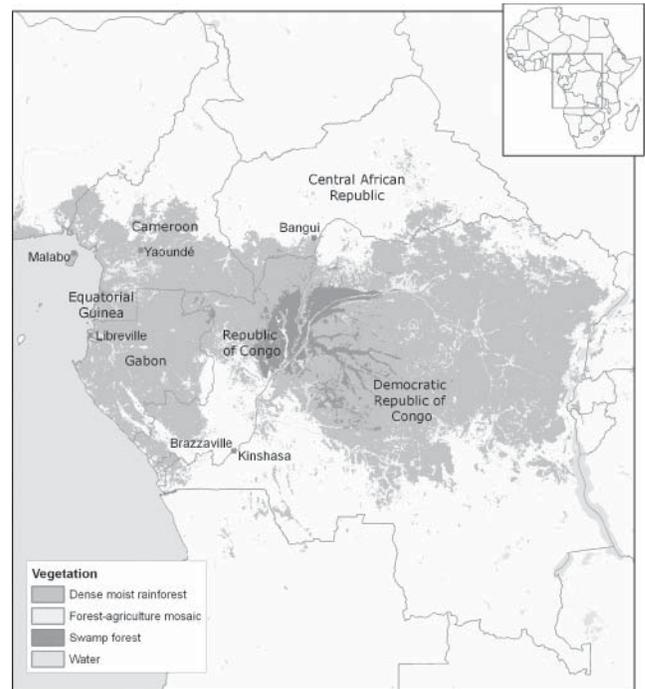
INTRODUCTION

Spanning approximately 200 million hectares, the forests of the Congo Basin¹ are rich in natural resources (see figure 1). This region contains the second-largest contiguous rainforest in the world (after the Amazon Basin) and is the fifth most biodiverse location on the planet.² The Congo Basin's forests also provide a wide range of ecosystem services, such as fuel wood, timber, nontimber forest products, water purification, and cultural and religious values. These benefits are crucial to the 30 million people who live in Congo Basin forests and the millions of others who are indirectly dependent on these forest services.³ In addition, the Congo Basin's forests help regulate the climate by sequestering and storing 10 billion to 30 billion metric tons of carbon, an ecosystem service especially important as concerns about human-induced climate change grow.⁴

The forests of the Congo Basin have had relatively low annual deforestation rates: less than 0.76 percent between 2000 and 2005, in contrast to deforestation rates in the same period of 2.56 percent in tropical South America and 2.90 percent in tropical Asia. Where deforestation is occurring in the Congo Basin, the proximate drivers are primarily small-scale subsistence agriculture and the growth of settlements.⁵ However, forest *degradation* rates are much higher than deforestation rates: between 1990 and 2000 forest degradation in Africa affected 5.4 percent of forested land.⁶ Degradation often occurs as a result of human activities such as the collection of fuel wood, selective logging, and the construction of roads for commercial logging or mining activities (see box 1). Once built, these roads often attract people to remote areas, thereby expanding the deforestation caused by the growth of settlements and of small-scale agriculture along the main routes to logging areas.⁷

The growing international demand for timber will likely lead to an increase in industrial logging in the Congo Basin, as approximately one-third of the

Figure 1 | Tropical Rainforests of the Congo Basin, 2009



forested region already has been allocated to logging concessions.⁸ In addition, planned large-scale transportation infrastructure projects that will provide easier access to remote regions, plus population growth and in-migration, may accelerate small-holder degradation in these areas. A proliferation of mining activities in the region will likely cause even more deforestation and degradation, and recent Chinese investments portend large-scale forest conversion to oil palm and other plantations.⁹

A new incentive mechanism developed in the Bali Action Plan under the United Nations Framework Convention on Climate Change, called Reduced Emissions from Deforestation and Forest Degradation (REDD), is intended to create financial incentives to keep these forests intact and manage them more sustainably. Under this mechanism, Annex 1 countries (developed or industrialized countries) would compensate developing countries for reducing deforestation and forest degradation. In addition, the Bali Action Plan calls for positive incentives for conservation activities, the

Box 1 | Definitions of Forest, Deforestation, and Forest Degradation

The UNFCCC defines a *forest* as an area of land at least 0.05 to 1 hectare in size, with a tree crown cover of at least 10 to 30 percent. The trees also must have the potential to reach a minimum height of 2 to 5 meters at maturity.

Deforestation is the direct human-induced conversion of forested land to nonforested land.

Forest degradation, which does not yet have an agreed on definition under REDD, is generally understood to be a human-induced, long-term reduction in forest carbon stocks and other forest values that does not meet the definition of deforestation.

Sources: Decision 11/CP.7 Marrakesh, Land Use, Land-Use Change and Forestry. United Nations Framework Convention on Climate Change (2001), D. Schoene et al., Definitional Issues Related to Reducing Emissions from Deforestation in Developing Countries. FAO Forests and Climate Change Working Paper 5 (Rome: FAO. 2007).

sustainable management of forests, and the enhancement of forest carbon stocks, collectively known as “REDD-plus.” In this paper we refer to REDD as the suite of activities that could be included in the REDD provisions after 2012, including REDD-plus activities.

New initiatives designed to support REDD in the Congo Basin include the World Bank’s Forest Carbon Partnership Facility (FCPF), in which both Cameroon and DRC are participating, and the United Nations’ REDD program, which has launched a quick-start initiative in the DRC. The Central African Forest Commission (COMIFAC) is also encouraging the incorporation of REDD into national planning and development strategies and has presented its position regarding REDD (see box 2).

To be effective, REDD incentives must reach both the agents causing the deforestation and degradation and the people who are directly dependent on, and manage, the forest’s resources. In the Congo Basin,

Box 2 | Key Positions of the COMIFAC on REDD

The Central Africa Forest Commission (COMIFAC) harmonizes the recommendations on REDD of the countries in the Congo Basin. The COMIFAC has issued a number of recommendations, including:

- Allow countries with historically low deforestation rates to develop reference emissions scenarios based on likely future development and allowing for periodic adjustment of the baseline.
- Include forest degradation in the scope of REDD activities.
- Include sustainable development policies in the scope of REDD activities.
- Increase funding to build technical and institutional capacity in advance of a REDD mechanism.

Source: G.P. Dkamela et al., Forests for Climate in the Congo Basin: Questions and Answers for Understanding the Challenges and Opportunities for REDD (Washington, DC: World Resources Institute. 2009).

these two groups are not mutually exclusive, as many local and indigenous communities are highly dependent on forest resources for their daily livelihoods and thus contribute to deforestation and degradation through small-scale agricultural conversion, selective logging, and fuel-wood collection. Unless their needs are addressed, REDD policies and measures may not be sufficient to counter deforestation and forest degradation resulting from small-holder activities. Furthermore, the social implications of REDD projects must be adequately considered when addressing the local people’s needs and concerns. Accordingly, in this paper, we examine the following two questions:

1. What are the needs and concerns of forest-dependent communities in the Congo Basin with regard to REDD?
2. What strategies could address these concerns and lay the foundation for effective measures to sustain the region’s forests for its people and the climate?

To answer these questions, we used our insights from engaging with a large number of forest-dependent communities, environmental and social NGOs, and national and provincial parliamentarians in Cameroon and the DRC.

APPROACH

In 2008 and 2009 in collaboration with NESDA and CODELT, WRI conducted a series of workshops and one-on-one meetings with more than 200 relevant stakeholders to raise their awareness of forest/climate issues and REDD policies. We offered both presentations and printed material in both English and French. In Cameroon, we held workshops with members of the Baka Pygmy communities and Bantu communities living in the forested area of the south and east regions of Cameroon, local environmental and social NGOs, and members of the Network for the Parliamentarians for the Sustainable Management of Forest Ecosystems in Central Africa (REPAR). In the DRC, we held workshops with members of the forest-dependent Batwa Pygmy communities from the Equateur and Orientale Provinces, indigenous NGO representatives, and provincial and national parliamentarians, including members of REPAR and representatives of the National REDD Coalition.

In addition to raising awareness of forest and climate issues, the workshops and one-on-one meetings were an opportunity to hear local and indigenous communities' perspectives about REDD implementation. The workshop participants were able to discuss their individual concerns regarding REDD design and implementation, and worked together to decide on priorities and recommendations based on those discussions. This paper summarizes those issues and concerns.

KEY ISSUES AND RECOMMENDATIONS

The concerns regarding REDD design and implementation that were raised during the workshops and one-on-one engagements were documented by NESDA and CODELT representatives. Using the participants' priorities as a

guide, WRI identified the common themes and five key issues that we examine in this paper along with supporting comments from the stakeholders, NESDA, and CODELT.

1. Limited Recognition of Land-tenure Rights

In both Cameroon and the DRC, all land that is not explicitly private belongs to the state. As a result, people worry that REDD will further threaten their informal and customary property rights (over which the state's formal ownership takes precedence) as the value of land increases and government and private-sector interest in the land grows. In the DRC, members of indigenous communities frequently noted the absence of land-use and zoning plans and expressed fear that the DRC government would zone their forests without their input and knowledge of the forest area. In Cameroon, the precariousness of community rights to land and forest resources was a concern (see box 3). This concern is exacerbated when intercommunity conflict creates more challenges to tenure clarity, as in the conflict between Baka hunter-gatherers whose rights to land are contested by Bantu agriculturists. These perennial conflicts between hunter-gatherers and agriculturists, and between these two groups and the state, raise concerns regarding how carbon rights for REDD would be defined and allocated.

2. Inadequate Information about Forest and Carbon Resources

Workshop participants in both Cameroon and the DRC frequently mentioned the lack of knowledge about forest and carbon resources as an impediment to effective REDD design and implementation. Countrywide information on forest cover and forest cover change is not gathered systematically, forest degradation is not routinely quantified, and information about carbon stocks and flows is not available. Even though independent and robust forest- and land-use monitoring is recognized as a prerequisite for an effective REDD system, local institutional and organizational capacity in this area is lacking. Basic information, such as the location of logging concessions, timber production levels, and related forest management information, is now becoming more readily available owing to a focus during the last decade on combating illegal logging. But access to information is still limited, particularly at the

local level where forestry codes and laws often are not available in local languages, and outreach on applicable forest management regulations is limited.

3. Weak Institutional Capacity and Unclear Roles

In the DRC, local community stakeholders were concerned about the limited capacity of government staff responsible for forest management and control. For example, the national forestry administration responsible for the control, monitoring, evaluation, and implementation of forest management plans is poorly funded and has insufficient personnel resources. Government agencies are inadequately staffed and have limited technical capacity, especially for monitoring forests and evaluating carbon stocks. In both the DRC and Cameroon, the ministries of forestry manage the forests and commercial logging concessions but have little knowledge of climate-forest interactions.

In addition to institutional capacity, local people in both countries worry that the many administrative agents involved in forestry planning has led to ambiguity in functional jurisdiction. In Cameroon, for example, the uncertainty over the administrative responsibilities for REDD between the Ministry of the Environment and Protection of Nature (MINEP) and the Ministry of Forestry and Wildlife (MINFOF) could compromise the planning and implementation of REDD. In addition, institutional centralization and the lack of accountability and transparency of centralized government entities were serious concerns for local communities, which worried that international negotiations represented the concerns of only an elite few. The centralization of forest-resource decision making has led to insufficient recognition of local rights, weak delegation of power over forest resources to decentralized entities, and little derived revenue for the forest-dependent communities. The central authority is even less effective in areas such as the eastern DRC, where government control has been directly threatened.

4. Inequitable Revenue Distribution

Cameroon has a constitutional provision that requires the sharing of tax revenues generated by forestry activities

Box 3 | The Campo-Ma'an Forest Area in Southwest Cameroon

An instructive example in which the lack of formal ownership rights and conflicting tenure claims has led to conflict with the state is the Campo-Ma'an forest area in southwest Cameroon. This area is one of the country's regions with the highest pressure on land and forest resources. In 1999, the government created a special management unit in the 771,668 hectare area that includes a national park, an agro-industrial area for rubber and palm oil plantations, a protection forest, logging concessions, and an agro-forestry zone where communities are authorized to carry out their agricultural, subsistence hunting, and community forestry activities. The community's portion of the land is approximately 203,677 hectares and is used by 61,000 inhabitants of seven ethnic groups: the Ntumu, Mvae, and Bulu who base their livelihoods on shifting cultivation and cocoa plantations: the Yasa and the Batanga whose main activity is fishing in the Atlantic Ocean but who carry out some agricultural activities: the Mabi, who primarily fish in the rivers: and the minority Bagyeli hunter-gatherers who have historically been seminomadic. There is permanent conflict among the indigenous communities, and between the indigenous communities and the state, regarding land tenure.

Source : G.P. Dkamela, Le complexe pauvreté/ressources naturelles dans l'UTO Campo-Ma'an: Revue analytique de la littérature anthropologique, sociopolitique et économique en vue de l'orientation des options d'intervention du programme WWF Kudu-Zombo, unpublished research report, WWF Kudu Zombo.

among the national government, the local council, and communities adjacent to forest concessions. In the DRC, benefits from forestry activities are shared by the national government, the provincial government, and the local governments where the revenue-generating activity takes place. Communities, however, have misgivings about both the national government and the local administrations involved in disbursing forestry funds, since the misappropriation of funds is commonplace.¹⁰ As one stakeholder from Cameroon commented, "Money is like water. One

Box 4 | The Kahuzi-Biega Reserve

The Kahuzi-Biega Reserve from the South Kivu Province of the DRC demonstrates communities' past experience of revenue distribution for conservation activities and highlights the challenges of revenue distribution where land tenure is unclear. In 1950, the reserve was established by an agreement between the colonial administration and the representatives of the local Bami people. The Bami representatives each received payment in accordance with local tradition. But since its inception, the reserve has been extended by more than 500,000 hectares, adding areas of low elevation in the Shabunda, Punia, and Walikale regions. The government expanded the reserve without consulting local people, involving them in the design of protected areas, or offering any form of compensation, despite the many Batwa pygmy villages in the area, including Musing, Kabona, Charondo (on an ancient Tshibati village site), and Kakumbukunu. All the Batwa were expelled from the area and were forced to move from area to area in order to avoid land disputes. The tension over land ownership has been exacerbated by the occupation of the park by various rebel groups and the resurgence of armed conflict.

cannot transfer it from one recipient to another without leakage." Furthermore, tangible benefits for local communities, such as infrastructure development and livelihood improvements, are often not realized (see box 4). Members of the local community thus recommended that the management and disbursement of revenues "should be different from what we know so far with the annual forestry fees."

5. Fewer Opportunities for Development

In Cameroon, stakeholders pointed to their communities' significant skepticism of REDD. Local and indigenous communities worry that REDD policies could favor developed countries while impeding the development of countries with large areas of forest cover, by preventing them from expanding their agricultural activities (see box 5). They are hoping that REDD will not preclude poverty reduction projects that

Box 5 | The Dja Biosphere Reserve

The case of the Dja Biosphere Reserve in the south and east regions of Cameroon illustrates the concern of local communities that REDD could reduce opportunities for agricultural expansion and livelihood improvement and also prevent development. The reserve is one of the largest protected areas in the Congo Basin, comprising 500,000 hectares of forested area. It includes 6,000 people in 37 villages, the majority of whom are Bantu agriculturists, and a minority of whom are Baka hunter-gatherers. Since the reserve's creation in 1950, no compensation scheme for forgone economic development or policy to improve welfare in the area has been implemented for the communities living in and near the wildlife reserve. One villager from Ekom, in the northeast reserve, noted, "We are conserved in the reserve like wildlife!" Although a portion of taxes from nearby logging concessions are paid to communities living near the forest management units, no funds are available for communities living within the reserve boundaries. Finally, communities in protected areas are worried that they will not receive any benefits from REDD mechanisms because protection would not be additional to a reference scenario, and they are generally concerned that REDD will reduce opportunities for development.

damage on forest cover. In both the DRC and Cameroon, however, past experience has left many communities suspicious of promises from the government and worried that REDD will be similar to previous projects that ended without the expected impact on their livelihoods. They are concerned that communities living in and around protected areas will not receive any compensation because their conservation activities will not be additional to business as usual, whereas the logging companies will receive REDD credits for reducing deforestation and associated carbon emissions.

Based on input from these stakeholders, WRI developed a number of recommendations for addressing these issues and challenges (see table 1).

Table 1 | Summary of Key Issues, Concerns, and Recommendations

Key Issues	Concerns	Recommendations
Limited recognition of land-tenure rights	<ul style="list-style-type: none"> ● Forest zoning is established with little or no consultation with and input from local communities. ● Community and/or customary land rights are precarious or nonexistent. ● Land-use and zoning plans are absent in some regions. 	<ul style="list-style-type: none"> ● Enhance participation and representation of local and forest-dependent communities in REDD design and forest-zoning processes. Require that REDD initiatives carry out free, prior, and informed consent of local communities during project or policy design. Unless the perspective of forest-dwelling communities that may be disproportionately impacted is taken into account, any REDD policy will be inadequate to address the full spectrum of deforestation and degradation drivers. ● Develop tenure systems that formally recognize customary use rights and traditional ownership. As part of this process, governments will need to conduct spatial planning with effective local consultation and involvement of civil society. Minority communities that may face discrimination in the delineation of land rights and the redistribution of revenue from forest benefits (e.g., carbon, timber) should be given special attention.
Inadequate information about forest and carbon resources	<ul style="list-style-type: none"> ● National-scale information about forest cover and forest cover change, forest degradation, and carbon stocks and flows often is absent. ● Technical capacity to generate and make publicly available information about forest and carbon resources is lacking. 	<ul style="list-style-type: none"> ● Test, refine, and institutionalize methods for improving the detection and quantification of deforestation, forest degradation (in particular, given its prevalence in the region relative to deforestation), and the associated greenhouse gas emissions in the Congo Basin. These methods should use modern remote-sensing technologies and geospatial approaches, balancing cost-effectiveness and precision. ● Build technical capacity of government agencies, academic institutions, and nongovernmental organizations in the Congo Basin to generate and use information about forest and carbon resources for better REDD implementation. This capacity should enable stakeholders to develop national forest-carbon accounting strategies, develop reference forest-carbon emission levels, monitor forest-resource utilization, and better implement sustainable forest management throughout the region. ● Develop an independent, nongovernmental “center of excellence” for forest monitoring and carbon accounting for the Congo Basin that will make information freely available for the development of REDD pilot projects at the level of local communities.
Weak institutional capacity and unclear roles	<ul style="list-style-type: none"> ● Forest ministries’ capacity and funding is lacking. ● Jurisdictional conflicts between forestry and environmental agencies are common. ● Institutional centralization prevents recognition of local rights and delegation of power to local communities. 	<ul style="list-style-type: none"> ● Ensure that REDD readiness funds in Congo Basin countries support training and other forms of capacity building for a range of stakeholders. Improved capacity will enable better policy implementation and enhanced enforcement of forest and climate policies. ● Ensure that the coordination of REDD is structured to include provincial and local representation while making the roles and responsibilities of the various institutions and actors clear. Establish a complaint resolution mechanism to give disenfranchised communities an opportunity to request improved participatory mechanisms.
Inequitable revenue distribution	<ul style="list-style-type: none"> ● Public revenue from forest-related taxes and fees often fails to reach local communities as promised by law. ● In instances when land rights have not been formally recognized, access to revenue from REDD is precarious. 	<ul style="list-style-type: none"> ● Establish a legal mechanism for the distribution of REDD benefits, based on input from local and forest-dependent communities, to ensure the fair distribution of REDD revenues. This includes developing plans to recognize informal or customary land rights, and a complaint resolution mechanism that provides recourse for communities that have not received stipulated payments. ● Develop, implement, and enforce a standardized accounting system that a range of stakeholders can use to track forest-related tax revenues and expenditures. ● Make information about the distribution and utilization of forest-related taxes and fees publicly available, so as to improve decision makers’ accountability.
Fewer opportunities for development	<ul style="list-style-type: none"> ● REDD may prevent agricultural expansion and community-based forest management. ● Communities living in or near areas protected under REDD may not receive compensation. 	<ul style="list-style-type: none"> ● Design a low carbon development plan in which national development and climate change mitigation are complementary rather than competing objectives. This includes decision-making tools for carbon-conscious agricultural expansion, and strategic investment in low-carbon sectors and business development opportunities. ● Prioritize projects that increase agricultural yields thus reducing the need for expansion into forested land. ● Develop and implement mechanisms to compensate communities living in and around forest conservation areas for forgone livelihood opportunities

CONCLUSIONS

The forests of the Congo Basin are a world treasure that provides crucial ecosystem services to forest-dependent communities and that stores enormous quantities of carbon. These forests are facing increasing threats from population growth, small-holder activities, and selective logging, and in the future they will likely face threats from industrial logging, large-scale transportation projects, and mining activities. Reduced Emissions for Deforestation and Forest Degradation (REDD) can create financial incentives to keep these forests intact. But for REDD or any related climate/forest policy to be effective, it must reflect the needs and concerns of forest-dependent communities. This paper has highlighted five major concerns of local stakeholders in the DRC and Cameroon regarding REDD: limited recognition of land-tenure rights, inadequate information about forest and carbon resources, weak institutional capacity and unclear roles, inequitable revenue distribution, and fewer opportunities for development. Many of these issues have been recognized as challenges to forest management for some time. However, the increased focus on the contribution of the region's forests to climate change mitigation has brought new attention to the socioeconomic needs and governance challenges for improving forest management. REDD may therefore provide an opportunity to resolve these long standing challenges. WRI has proposed strategies to address these issues and ensure a successful REDD process in the Congo Basin that includes the participation of local people. These recommendations can be used to ensure that REDD policies mitigate climate change, improve forest governance, and benefit local and indigenous populations in the region.

ACKNOWLEDGMENTS

The authors gratefully thank the David & Lucile Packard Foundation for their funding of this project. In addition, we would like to thank our WRI Internal Reviewers: Kirk Herbertson, Kimberly Thompson, Lauren Goers, and Florence Daviet, and our External Reviewers: Rane G. Cortez (Forest Carbon Policy Advisor, The Nature Conservancy) and Olaf Zerbock (Climate Change Initiatives Manager, Conservation International).

NOTES

1. The Congo Basin includes Cameroon, Central African Republic, Democratic Republic of Congo, Equatorial Guinea, Gabon, and the Republic of Congo.
2. Secretariat of the Convention on Biological Diversity and Central African Forests Commission, *Biodiversity and Forest Management in the Congo Basin* (Montreal, 2009).
3. Congo Basin Forest Partnership, *The Forests of the Congo Basin: State of the Forest 2006* (2006).
4. E.J. Lindquist and K.B.F. Kamelarczyk, *Linking Remote Sensing and Field Data to Model Carbon Stocks in the Congo Basin: A Tool for REDD*, IOP Conf. Series: Earth and Environmental Science 6 (2009).
5. H.J. Geist and E.F. Lambin, Proximate Causes and Underlying Driving Forces of Tropical Deforestation, *Bioscience* 52 (2002).
6. K.M Chomitz, et al., *At Loggerheads? Agricultural Expansion, Poverty Reduction, and Environment in the Tropical Forests*. A World Bank Policy Research Report (2006).
7. W.F. Laurance et al., Impacts of Roads and Linear Clearings on Tropical Forests. *Trends in Evolution and Ecology* 1149 (2009).
8. N. Laporte et al., Expansion of Industrial Logging in Central Africa, *Science* 316 (2007).
9. N. Laporte et al., Reducing CO₂ Emissions from Deforestation and Degradation in the Democratic Republic of Congo: A First Look. Woods Hole Research Center, 2007.
10. K. Morrison et al., Broken Promises: Forest Revenue-Sharing in Cameroon, WRI Forest Note, 2009.

ABOUT THE AUTHORS

Guy Patrice Dkamela is the Forests and Climate Change Facilitator for the Network for the Environment and Sustainable Development in Central Africa (NESDA-CA) based in Yaoundé, Cameroon.

Félicien Kabamba Mbambu is the Program Manager for the Council for Environmental Defense by Legality and Traceability (CODELT) based in Kinshasa, DRC.

Kemen Austin is a forest and climate researcher in the People and Ecosystems Program at WRI.

Susan Minnemeyer is WRI's GIS Manager, and works with several projects in the People and Ecosystems Program to improve access to information on the monitoring and management of forests.

Fred Stolle is a Senior Project Manager in WRI's Forest Landscape Objective, working on forest governance, forest monitoring, and climate change.

ABOUT WRI

WRI is an environmental think tank that goes beyond research to find practical ways to protect the earth and improve people's lives.