



# RESTORING LIVES AND LANDSCAPES

How a partnership between local communities and the state  
is saving forests and improving livelihoods in Guinea



The World Agroforestry Centre, an autonomous, non-profit research organization, aims to bring about a rural transformation in the developing world by encouraging and enabling smallholders to increase their use of trees in agricultural landscapes. This will help to improve food security, nutrition, income and health; provide shelter and energy; and lead to greater environmental sustainability.

We are one of the 15 centres of the Consultative Group on International Agricultural Research (CGIAR). Headquartered in Nairobi, Kenya, we operate six regional offices located in Brazil, Cameroon, India, Indonesia, Kenya, and Malawi, and conduct research in eighteen other countries around the developing world.

We receive our funding from over 50 different investors. Our current top ten investors are Canada, the European Union, Finland, Ireland, the Netherlands, Norway, Denmark, the United Kingdom, the United States of America and the World Bank.



The Center for International Forestry Research (CIFOR) is a leading international forestry research organization established in 1993 in response to global concerns about the social, environmental, and economic consequences of forest loss and degradation. CIFOR is dedicated to developing policies and technologies for sustainable use and management of forests, and to enhancing the well-being of people in developing countries who rely on tropical forests for their livelihoods.

CIFOR is one of the 15 centers supported by the Consultative Group on International Agricultural Research (CGIAR). With headquarters in Bogor, Indonesia, CIFOR has regional offices in Brazil, Burkina Faso, Cameroon and Zimbabwe, and performs research in over 30 other countries around the world.



# RESTORING LIVES AND LANDSCAPES

How a partnership between local communities and the state  
is saving forests and improving livelihoods in Guinea

© World Agroforestry Centre, CIFOR, 2009

Suggested citation: Pye-Smith C. 2009. *Restoring Lives and Landscapes: How a partnership between local communities and the state is saving forests and improving livelihoods in Guinea*. Bogor: Center for International Forestry Research (CIFOR); Nairobi: World Agroforestry Centre.

ISBN: 978-92-9059-259-4

Publisher: World Agroforestry Centre and CIFOR

Author: Charlie Pye-Smith

Concept/Supervision: Michael Hailu

Editing: Kris Vanhoutte & Rebecca Selvarajah-Jaffrey

Design and Layout: Reagan Sirengo

Photographs including cover by Charlie Pye-Smith except pages 11, 20, 21: Terry Sunderland;  
page 27: Jan Beniast.

Printed in Kenya

Front cover: The LAMIL project has helped to improve the incomes of families like these.

The information in this booklet is based on project documents, surveys by the LAMIL project and its partners, and interviews conducted by the author of this publication.

This booklet may be quoted or reproduced without charge, provided the source is acknowledged. No use of this publication may be made for resale or other commercial purposes.

All images remain the sole property of their source and may not be used for any purpose without written permission of the source.

World Agroforestry Centre  
United Nations Avenue, Gigiri  
P. O. Box 30677-00100  
Nairobi, Kenya.  
Tel: + (254) 20 722 4000  
Via USA (1-650) 833-6645  
Fax: + (254) 20 722 4001  
Via USA (1-650) 833-6646  
Email: [icraf@cgiar.org](mailto:icraf@cgiar.org)  
Website: [www.worldagroforestry.org](http://www.worldagroforestry.org)

Center for International Forestry Research (CIFOR)  
Jalan CIFOR  
Situ Gede  
Bogor Barat 16115, Indonesia  
Mailing address:  
P.O. Box 0113 BOCBD  
Bogor 16000, Indonesia  
Tel: + (62) 251 8622 622  
Fax: + (62) 251 8622 100  
Email: [cifor@cgiar.org](mailto:cifor@cgiar.org)  
Website: [www.cifor.cgiar.org](http://www.cifor.cgiar.org)

# Contents

	Page
Foreword	iv
Introduction: A Partnership for Change	1
The problem	2
 1. WORKING TOGETHER TO SAVE THE FORESTS	 5
Research that made a difference	6
Government matters	9
 2. CREATING THE RIGHT INCENTIVES	 13
Trees for a better future	15
Weighing up the benefits	17
 3. THE WILDLIFE RETURNS	 21
Hunters become conservationists	23
 4. LOOKING TO THE FUTURE	 27

# Foreword

This booklet tells the story of a project that has had a profound influence on the management of four large forest areas in Guinea. The Landscape Management for Improved Livelihoods (LAMIL) project has also done much to improve the welfare of local people. Indeed, the two – better forest management and improved livelihoods – are inextricably linked.

The World Agroforestry Centre, the Center for International Forestry Research (CIFOR) and their partners in the LAMIL project have developed a system of co-management, involving local communities and government agencies, which is generating considerable interest in Guinea and throughout the region.

Not long ago, these forests were managed by government agencies. Local people were forbidden from using them. As a result, the forests were widely abused, and the authorities were able to do little to stem the tide of illegal logging, poaching and land clearance. Under co-management, in contrast, local people derive real benefits from the forests, and in return they have shown their willingness, and ability, to manage them sustainably.







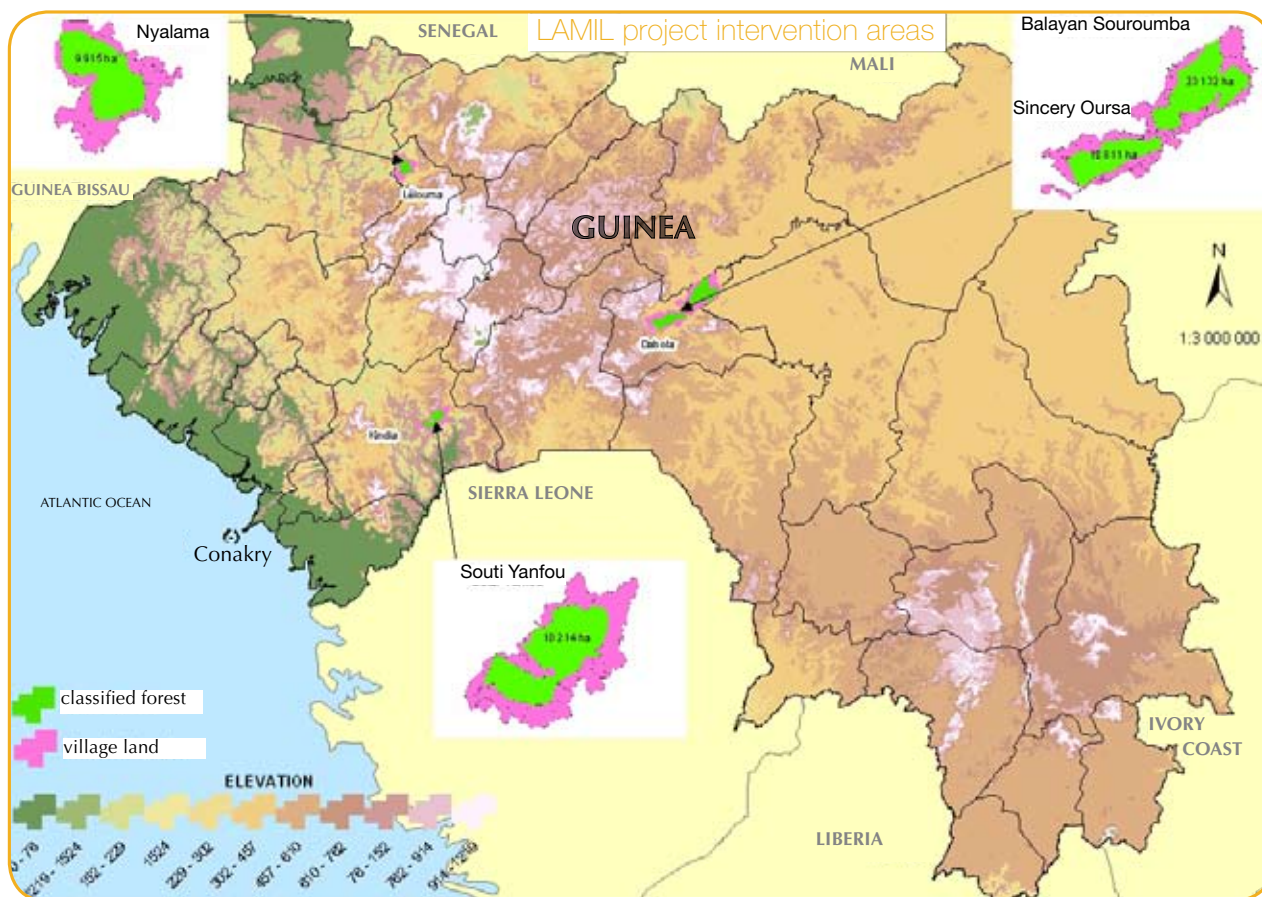
The LAMIL project benefited greatly from the partnership between our two organizations. With long experience of researching and promoting the use of trees on farms, the World Agroforestry Centre was able to develop the sort of incentives local people need to improve the productivity of their land. This has helped take pressure off the forests. At the same time, CIFOR's experience working with forest-dwelling communities around the world contributed greatly to the development of the new co-management regimes.

We would like to express our gratitude to the United States Agency for International Development (USAID) for supporting this four-year project. We would also like to pay tribute to our staff. The success of the project owed much to the close collaboration between the then regional coordinators for the World Agroforestry Centre and CIFOR, Harold Roy-Macaulay and Daniel Tiveau, their science advisors, Antoine Kalinganire and Terry Sunderland, and our staff in the field.

Dennis Garrity  
Director General  
World Agroforestry Centre

Frances Seymour  
Director General  
Center for International Forestry Research

◀ *The LAMIL project has enabled Mustapha Diakité to establish a tree nursery, buy livestock and build a new house.*



▲ LAMIL project intervention areas. (Map © LAMIL, Labé – May 2006)



## Introduction: A Partnership for Change

Sayon Kourouma's life began to change for the better in 2006 when she received 17 kg of high-yielding peanut seeds. Before long, her *Fleur 11* peanuts were providing more than double the yield of the local variety. She earned enough money with the first harvest to buy a bed and pay for one of her eight children to get married. After the next, she bought a cow for 680 000 Guinea Francs (US\$130). She named it LAMIL, the acronym of the project – Landscape Management for Improved Livelihoods – which was transforming her life.

"I'm now earning four times as much as I made in the past," she says. "If the children are sick, I don't have to ask my husband for money, I can pay for the medicines myself. And we can eat what we want, when we want." While she tells her tale, she feeds her cow with one hand, while the other holds a mobile phone – another sign of her new-found prosperity.

This is a familiar story in the villages around Balayan Souroumba Forest, and the president of the forest management committee, Mustapha Diakité, listens with approval rather than surprise. He has also benefited from the project. For one thing, the profits from his tree nursery, established with help from the LAMIL project, have enabled him to pay off his debts and buy a motorbike, livestock and the bricks to build a new house. "This project has changed my life," he says.

He adds that the LAMIL project has also led to an improvement in the way the local forests are managed. Not long ago, the villagers had no legal right to use Balayan Souroumba Forest. As a result, illegal logging, land clearance and poaching were rife. However, in 2007 the forest



▲ The woman who called her cow LAMIL. "The project has brought great changes to our lives," says Sayon Kourouma.

management committee, which represents the local community, entered into a legal contract to manage the forest with the government. Co-management, as it is known, is not only benefiting the villagers, but protecting and restoring the forests. Water sources that dried up years ago are flowing again; buffalo, leopard and lion have returned; tree cover has steadily increased.

Launched in 2005, the main aim of the LAMIL project was to protect and enhance biodiversity in four of Guinea's 156 'classified forests' by creating incentives that encourage local communities to respect the forests and share responsibility for their management.

## The problem

Guinea ranks 170 out of 182 countries in the 'human development index' devised by the United Nations Development Programme as a relative measure of health, education and economic status in developing countries. Average life expectancy is 57 years; 150 out of every 1000 children die before the age of five; and adult literacy is just 29.5%. Approximately half the population must survive on US\$1 or less a day, and life is particularly harsh in rural areas, where most Guineans live.

Rapid population growth, poor governance and high levels of poverty are among the factors that have led to widespread environmental degradation and the loss of forests in Guinea. This poses a significant threat to flora and fauna, especially in the Fouta Djallon Highlands, and to the region's water supply. Every major river in West Africa, including the Gambia, the Senegal and the Niger, rises in the Highlands, and the loss of forests here would have serious consequences for the well-being of millions of people.

It was partly for this reason that the French colonial authorities decided to strengthen forest protection in the 1940s and 1950s. This often caused great distress to local communities. For example, when Balayan Souroumba was classified in 1951, around 500 people were forcibly evicted and subsequently forbidden from entering a forest they had always considered theirs.

In those days, classified meant that the forests were protected either to conserve wildlife or as a way of guaranteeing future energy supplies, in the form of fuelwood, for the cities.

“Before 1951, the forests provided villagers with much of their needs,” explains Sek Farba Samba of the Department of Forests and Fauna (DNFF). “They grew crops there, collected honey, gathered firewood and hunted game.” Those found encroaching after the French took over the management of the forests were harshly treated, and a repressive system remained in place long after the country gained independence in 1958. Nevertheless, villagers continued to enter the forests in search of food and timber; the wealthier among them even cleared land for cultivation with the connivance of government officials, whom they bribed in return for access.

“People didn’t go to the forests because they were bad,” explains Amara Keita of the national extension service, L’agence nationale de la promotion rurale et de conseil agricole (ANPRCA). “They went because they had to survive. They simply had no alternative.”

This us-and-them system of forest management didn’t work, either in Balayan Souroumba or any of the other classified forests in Guinea. “Illegal logging, the use of fire to clear land, poaching wildlife – all these things continued when there was a repressive management regime,” says Kourouma Christine Sagno, the director of DNFF. “That’s why we’re keen to promote co-management as an alternative throughout the country.”

According to Sagno, co-management is the best way forward, both for Guinea’s forests and for the people who live near them. Her department now sees classified forests in a different light to the authorities who created them. Their primary purpose is to conserve important ecosystems, but there is a presumption that they should also provide some of the goods and services that local people need.



▲ Rapid population growth threatens the environment. Women fishing in an upland lake.





# 1. WORKING TOGETHER TO SAVE THE FORESTS

Involving villagers in forest management is not a new concept in Guinea. Between 1993 and 1999 the United States Agency for International Development (USAID) provided a large grant to support the Natural Resources Management Activity, with the aim of improving environmental management by working with local communities in and around seven classified forests. This was followed by the Expanded Natural Resources Management Activity, which ran from 1999 to 2005.

Although these projects led to better resource management in some areas, an evaluation commissioned by USAID found that they failed to fully consider the needs of the people living in and around the forests. Consequently, there was limited buy-in from local communities, many of whom remained hostile to conservation. The evaluation also suggested that the projects failed to integrate the various activities undertaken in the field, and had little impact on national policy making. Monitoring and evaluation were weak, and no serious assessment was made of their impact on local livelihoods.



▲ Most people in rural Guinea live without access to running water or electricity, and are entirely dependent on natural resources for their survival.



To address these shortcomings, USAID invited the World Agroforestry Centre, the Center for International Forestry Research (CIFOR) and the United States Forest Service (USFS) to launch the LAMIL project in 2005, building on the experiences of the past decade. USAID expected the project partners to work closely with government departments and create strong partnerships with universities and local research centres, in the belief that this would ensure the sustainability of activities established by the project. USAID anticipated that the project would benefit from the partners' long experience of working on research activities related to both forest conservation and the improvement of local livelihoods.

## Research that made a difference

Unlike its predecessors, LAMIL had a strong element of research. Indeed, its development activities were only formulated after an extensive period of interviews and fieldwork in and around the four classified forests of Balayan Souroumba, Sincery Oursa, Souti Yanfou and Nyalama.

"There were a number of key questions we had to address," explains CIFOR scientist Michael Balinga. "Why hadn't co-management worked? How do you reconcile local people's need to make a living with conservation? What sort of incentives do you need to encourage villagers to take an interest in protecting the forests?"



▲ CIFOR scientist Michael Balinga (second from right) discusses conservation issues with members of Sincery Oursa forest management committee.

Building on CIFOR's experience in co-management, the project began by canvassing the opinions of those involved with the existing forest management committees, and others who had observed them from outside. A number of weaknesses were immediately apparent. The committees were often controlled by individuals who were keen to further their own interests and they were dominated by men, even though the forests are just as important to women. Out of the four forest management committees, only one had been given legal recognition. The others, which had less experience of co-management, had failed to comply with local laws on how to register and run community-based organizations. This meant that they had no mandate to act on the decisions they made.

The project partners concluded that co-management would only work if the existing committees were reorganized, and this was done for each of the four classified forests in 2007. To ensure that the new committees attracted people with a genuine interest in forest management, and to avoid the issue of 'elite capture,' membership was now open to anyone who paid a registration fee of 10 000 Guinea Francs (US\$2). LAMIL stipulated that at least 25% of members on the executive committee should be women. The new committees were legally recognized in 2007, when they signed co-management agreements with DNFF.

The committees have various functions. They participate in the design and implementation



▲ The LAMIL project has encouraged women to play an active role on the forest management committees.

of forest management plans and they play an important role in the promotion of income-generating activities. They negotiate development priorities both among their own members and with local authorities. They also have the power to raise revenues, for example through the harvesting of timber, and they determine how their share – the government takes a percentage – is used.

There was a time when villagers were so sceptical about co-management that they tore down project signboards. Those days are long gone. “Before we got legal recognition,” explains Mamadou Diallo, the secretary of Sincery Oursa Forest Management Committee, “we derived hardly any benefit from the forest. But now, thanks to LAMIL, we’re profiting from the forest and it is now in a much better condition.”

Management plans, drawn up in consultation with DNFF, determine what can and cannot be done. Certain activities are allowed. For example, in Sincery Oursa Forest, committee members can gather dead wood and collect specified non-timber forest products, such as wild fruit. They can do so free of charge if this is for their own consumption, but pay a tax if the goods are for sale. Members can also hunt common species capable of replenishing their numbers swiftly, such as guinea-fowl, antelope and hare, providing this is for their own consumption and hunting is restricted to an agreed season. There are strictly enforced bans on setting fire to the forest, cutting timber near rivers and using toxic products to kill fish. Besides ensuring that these regulations are respected, the forest management



▲ Former hunter Sancy Camara (right) now plays a leading role in the sustainable management of Sincery Oursa forest.

committee undertakes a number of activities, including tree planting, the monitoring of chimpanzee populations and the creation of firebreaks.

## Government matters

The USAID-funded projects that preceded LAMIL were managed by two development consultants, Chemonics and Winrock International, with local non-governmental organizations (NGOs) being largely responsible for day-to-day operations on the ground. Government departments were scarcely involved, and this was one of the weaknesses, according to Balinga. “The government was kept informed, rather than involved, and as soon as the project ended, the NGOs left and everything seemed to crash,” he recounts.

LAMIL’s approach of working closely with government agencies and recruiting government staff to its head office, first at Labé, and later in Conakry, undoubtedly contributed to its success. “Many of the NGOs had little experience of working with villagers,” says Fernand Delacour, who was seconded to LAMIL by DNFF.



▲ LAMIL’s success owes much to government staff like Sek Farba Samba (left), seen here with members of a forest management committee.

“In contrast, government staff who worked with LAMIL were better educated and they had a good understanding of local communities and their needs.”

Amara Keita, who was seconded to LAMIL by the national extension service (ANPRCA), believes that the project’s heavy reliance on government staff helped to ensure its sustainability. “One of the differences between us and the NGOs,” he says, “is that we are still there, working with the villagers.” Although LAMIL came to an end in 2008, government staff who worked with the project continue to provide advice and support to the forest management committees.

While CIFOR and the World Agroforestry Centre concentrated most of their activities on the four field sites, the other international partner, USFS, fed the research findings and the experiences in co-management into national policy processes. USFS was closely involved in the writing of the co-management guide for classified forests in Guinea, and it provided background information that helped to shape the new Participatory Forest Management Strategy. As international research centres, CIFOR and the World Agroforestry Centre were able to link their research findings to work of a similar nature in other countries.



▲ Flour mills are among the income-generating ventures established by the LAMIL project. This one in Kallala village has raised over 1 million CFA (US\$2000), which will be used on community projects.



The successful participation of local communities in the management of their resources has encouraged the government to actively promote co-management. “This is an excellent example of how research can influence policy, bringing about changes in legislation which reflect the success of new management approaches,” says CIFOR scientist Terry Sunderland.

DNFF’s director, Kourouma Christine Sagno, believes that co-management has helped to reconcile local communities and government departments. “DNFF no longer sees local communities as murderers of the forests,” she says. “And local communities are no longer afraid of DNFF. They no longer see us as the enemy.”

Although the idea of co-management has been around in Guinea for many years, Sagno believes that it only became embedded in the minds of local communities during the LAMIL project. “It is the best way of managing classified forests,” she says. “Local communities are benefiting from their involvement in forest management, but the government still maintains a say in how the forests are managed.”



▲ Better forest management makes good financial sense. These boys are selling nere seeds, harvested in the wild from African locust bean trees (*Parkia biglobosa*) and used as a spicy condiment.



# PROJET LAMIL

Landscape Management for Improved Livelihoods  
ICRAF-CIFOR SNPRV-IRAG  
USAID-DNEF-ACA

FORET CLASSEE de: SOUTI YANFOU  
VILLAGE de: Takouba de Kolenté  
COOPERATIVE de: Takouba de Kolenté  
TABLEAU de SUIVI des PRIX des PRODUITS

Date: 15 / 3 / 2009

Marché	Nom du produit	Prix Kg / mini / unité	Prix Kg / maxi / unité
Kindia Centre	maïs	3000 <sup>FG</sup>	4200 <sup>FG</sup>
	Riz	3000	4000
	ARACHIDE	2800	3000
Kolenté Centre	maïs	4000	4400
	Riz	4000	4400
	arachide	4000	4200
	maïs	3300	4000

## 2. CREATING THE RIGHT INCENTIVES

The success of co-management owes much to the introduction of a range of farming and agroforestry practices in the villages around the four classified forests. “These acted as a reward mechanism,” says Serge Ngendakumana, a scientist with the World Agroforestry Centre. “By improving the incomes of people living near the forests, they helped to reduce the pressure on the forests.” They also helped to increase tree cover within and around the forests.

In 2005 and early 2006, LAMIL conducted a ‘rapid participatory diagnosis’ in 35 villages. The researchers and the villagers discussed everything from local livelihoods and farming practices to the conservation of the forests and wildlife. “Most of the problems we identified were related to high levels of poverty,” explains Ngendakumana. “As long as people were poor, there would be little incentive for them to refrain from exploiting the forests, which would continue to suffer from abuse. That meant we had to find ways to raise their incomes.”

Working in partnership with Guinea’s National Agricultural Research Institute (IRAG), the International Crops Research Institute for the Semi-Arid Tropics



▲ A LAMIL notice (opposite) tells farmers like Siata Dabo (above) how much they will get for their produce – maize, rice and peanuts – in different markets on any given day.



(ICRISAT) and the World Agroforestry Centre, the national extension service introduced and tested a range of farming and agroforestry practices. Farmers were encouraged to plant improved varieties of peanut, maize, cassava and banana. They also planted a range of trees, and learned how to manage manure pits and establish 'live fences' to restrain their livestock and provide fodder, fuel and food.

The impact, in terms of increased agricultural production, was impressive. To give just one example, *Fleur 11*, the improved variety of peanut planted by Sayon Kourouma, the proud owner of a cow called LAMIL, yielded an average 2268 kg per hectare in Sincery Oursa in 2007, compared to just 700 kg for the local variety.

The national extension service disseminated the new technologies and provided training on how to use them, but this was a far cry from the top-down approach often favoured by development projects. In Guinea, the national extension service and the World Agroforestry Centre devised and tested a new approach called FIVA, or the Farmers' Initiative and Vision-Based Approach. "We found that when farmers take a leading role in choosing and promoting new farming and agroforestry technologies, the level of uptake is much higher than it would be without their participation," says Ngendakumana.

Farmers themselves took on responsibility for training others who wished to adopt the new practices. Mrs Kourouma, for example, now provides advice to many of her neighbours, including her husband's three other wives.



▲ Improved crop varieties have helped increase farmers' yields. As a result Kémo Sylla no longer needs to exploit the local forests.

All of them are now getting better yields and earning more than they did in the past. “This has taken some pressure off our husband,” she says generously. “He’s been able to buy a motorbike and he’s about to build a house.”

## Trees for a better future

The LAMIL project also increased incomes by encouraging communities to plant high-value trees, both within and outside the classified forests. During the financial year 2006–07, over 120 000 seedlings were distributed. Around 25 000 trees were used to establish live fences; in other words, fences that can be pruned to provide fuelwood and animal fodder. The rest were used to restore degraded land inside the classified forests, create community forests and establish orchards on communal farmland.

To ensure a sustainable supply of seedlings, LAMIL helped 13 farmers to establish private nurseries. “When I heard about this idea, I put myself forward as I’d always enjoyed planting trees,” explains Mustapha Diakit , president of Balayan Souroumba Forest Management Committee. With help and training from LAMIL, Diakit  set up a nursery in the compound where he lives with his four wives and 16 children in Kolon village. In 2006, he sold 3455 plants, of 16 different species, for 3 376 000 Guinea Francs (US\$675). In 2008, he sold over 5300 seedlings; his profits rose accordingly.



▲ Mustapha Diakit  and the motorbike he bought with the profits from his nursery.



The success of the nurseries can be attributed, in part, to the buoyant demand for seedlings, but the farmers have also benefited from the creation of a network that links them to commercial nurseries in Kindia, a major trading centre for farm produce some 70 miles north-east of the capital, Conakry. “Whenever any of the nurseries need any technical help, they can get in touch with me and we provide advice,” explains Fodé Camara, a nursery owner who now acts as a consultant to a new project, similar to LAMIL, along the border between Sierra Leone and Guinea.

During the lifetime of the LAMIL project, local communities planted over 300 000 trees, mostly within the classified forests, although significant numbers were also planted on farmers’ fields outside the forests.

Management plans for the classified forests allow forest management committees to establish agroforestry plots covering a maximum of 145 hectares a year. Priority is given to high-value species that yield fruit, cooking oil, fodder and medicinal plants. This must be done with the approval of the local offices of DNFF, who ensure that the planting does not take place on land of high conservation value. The management plans stipulate that when clearing land for agroforestry, farmers must leave 100 trees per hectare.



▲ The LAMIL project has benefited from the expertise provided by commercial nursery owners like Fodé Camara of Kindia (right), seen here with an enthusiastic student from the local university.

## Weighing up the benefits

Visit any village where LAMIL has been active and you will hear much the same story. Most obviously, those who have adopted new farming and agroforestry practices have experienced a significant rise in their incomes. Unfortunately, precise figures are hard to come by. One survey found that over a two-year period 50% of households saw their incomes rise by more than a quarter. This enabled families to buy livestock, improve their diets and buy consumer goods. Interviews conducted for this booklet found that many villagers had increased their incomes by a factor of three or more, thanks largely to the activities promoted by LAMIL.

Co-management has also meant that local communities have collectively benefited from the classified forests. For example, the forest management committee in Balayan Sourumba sold some of its timber to a merchant from Conakry. With the money earned the committee was able to build a three-classroom primary school for 50 children in the village of Rafou. Much the same happened in the village of Sougeta, in Souti Yanfou, where the proceeds from the harvest of 2.5 hectares of teak paid for the construction of a secondary school and a community well.

“When people in Sougeta who weren’t members of the local forest management committee saw the benefits,” says CIFOR scientist Michael Balinga, “they began to say: if this is what co-management means, we want to join too.”



▲ End of an era. These children in Rafou village are about to move into a new school, paid for by the local forest management committee with the profits from timber sales.

Inevitably, there can be conflicts when it comes to allocating funds earned from the harvesting of timber and other resources. In Kolente, a small town beside Souti Yanfou Forest, Mohammed Lamine Bangoura, the sous-préfet appointed by central government, is far from happy. “The forest management committee failed to consult the people of Kolente about how the profits from the teak harvest should be used – even though they have as much right to profit from the teak as the people of Sougeta,” he says.

Nevertheless, he concedes that income-generating projects established by LAMIL have done much for his district. “They have improved the standard of living of many families,” he says, citing in particular the small flour mill close to his office. One of several set up under LAMIL, this mill was established by a group of six women who had been working together on a scheme to raise money from market gardening. “We’d increased the productivity of our fields,” recalls Kia Bangoura, “and we were looking for ways of adding value to our crops.”



▲ Sustainably harvested timber is being sold to raise money for local development projects.

There are two machines in the mill. LAMIL provided the first; the second was provided by a non-governmental organization that helped the group after the LAMIL project ended. Both serve farmers living in Kolente and nearby villages. “This has helped to change our life in so many ways,” says Mrs Bangoura. “We earn more, and that means that we aren’t so dependent on our husbands. And all the women on our committee now have mobile phones.” The mill, like many other activities established under LAMIL, no longer needs outside help to survive.



▲ According to Kia Bangoura, the LAMIL project has done much to improve the welfare of women. She is seen here outside a mill set up with LAMIL funds.







### 3. THE WILDLIFE RETURNS

Between 1990 and 2005, Guinea lost over 9% of its forests, and forest loss continues at the rate of around 0.5% a year<sup>1</sup>. This has inevitably had a negative impact on the country's wildlife. A baseline study in the four LAMIL sites, conducted in 2005, found that all had suffered significant losses. For example, in Nyalama, wild pig and *Borassus* palm were almost extinct; buffalo and lion had entirely disappeared from Balayan Souroumba and Sincery Oursa; leopard and baboon had declined in all four forests.

There is plenty of evidence to suggest that wildlife populations have made a good recovery since then. "Buffaloes had entirely disappeared in Balayan Souroumba by 2000," explains Sek Farba Samba of DNFF. "Now they've come back, and they are regularly seen." Leopards have also returned, and hyenas and lions – which had not been seen for years – pass through the forests during the rainy season.

A short distance to the east, in the villages bordering Sincery Oursa, you will hear a similar story. "Hyenas became extinct some time ago, but during the last three years they have begun to return in good numbers," says Sancy Camara, a local hunter, "and we've also seen signs of lions, which sometimes kill livestock."



▲ On the right track. Leopards (above) have become more plentiful during recent years. Chimpanzees (left) are also benefiting from better forest management.

<sup>1</sup> Guinea Deforestation Rates and Related Forestry Figures.  
<http://rainforests.mongabay.com/deforestation/2000/Guinea.htm>  
(accessed on 26 October 2009)

Nyalama is the only classified forest where the fortunes of its larger mammals have been tracked over time. A few species declined between 2005 and 2008 – for example, lion went from being rare to extinct – but most increased in number. Chimpanzee and mongoose were classified as threatened in 2005; by 2008, their numbers had begun to increase. Colobus monkey, yellow baboon, porcupine and warthog all went from threatened to very abundant, and most other species either held their own or became more abundant.

There are several explanations for the recovery of wildlife in the four forests. For one thing, the LAMIL project has changed people's attitudes, and most are happy to abide by the laws that protect forests and wildlife. "They can now see a link between good management and an improvement in their livelihoods," says Alimou Barry of the national extension service. "For example, people aren't lighting so many destructive fires and this has been good not just for wildlife, but for the villagers as well."

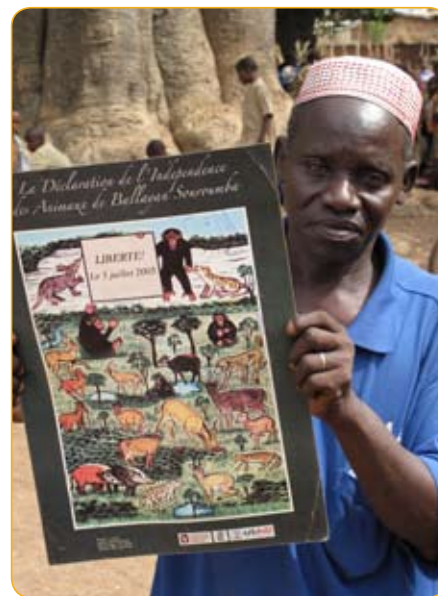
The area affected by fire each year has been reduced by around 80%, and illegal encroachment has declined significantly. As a result, forest products such as wild fruits, shea butter and *nere*, the yellow seeds eaten as a snack and condiment, are now more plentiful. Reforestation schemes within the forests have also helped. Just as significantly, large areas have been given total protection to ensure the survival of some 400 chimpanzees, and forest management committees have introduced controls on hunting.

## Hunters become conservationists

“The project began with the premise that if we could protect chimpanzee habitat, that would be good for all of the wildlife,” explains CIFOR’s Michael Balinga, “but this would only happen if the villagers were fully involved.”

Researchers collaborated with local communities to identify the critical habitats for chimpanzees, including their migratory corridors, feeding places and watering points. In total, these critical habitats covered an area of 22 171 ha out of a total of 118 378 ha in the four forests. The communities agreed that these areas should be given complete protection. LAMIL also organized an education programme to teach children and adults about conservation, and it supported the creation of hunters’ associations, which have played a key role in protecting wildlife.

The hunters’ associations in Nyalama and Balayan Souroumba decided to introduce total bans on all hunting within their forests. The latter marked the occasion by distributing over 600 posters entitled ‘Declaration of independence of the animals of Balayan Souroumba’, and 4000 copies of an illustrated book about an orphaned chimpanzee that had been returned to the wild. “The association and the forest management committee took the decision to ban hunting so that wildlife populations could recover,” explains Mustapha Diakité. “Once they have, we may decide to allow controlled hunting of certain species.”



▲ Hunters’ associations are now spreading the conservation message. Sali Mara, secretary of Balayan Souroumba forest management committee, with the ‘Declaration of independence.’


Many hunters have been involved in monitoring chimpanzee populations and patrolling the forests. Sancy Camara, for example, first received training on forest protection in 2003 under the USAID-funded Expanded Natural Resources Management Activity. During the LAMIL project, he was one of 12 local hunters involved in chimpanzee monitoring in Sincery Oursa Forest.

“Each of us was allocated a chimpanzee trail – mine was 15 kilometres long – and we spent six days each month walking the trail, noting chimpanzee movements and the presence of other wildlife,” explains Camara. While the project was active, he was paid for his services. He continues to walk the trail, but he is no longer paid. When asked why, he says it is something he’s got used to doing. “It also gives me great pleasure to see chimpanzees in the forest,” he adds, before telling the story of Bébé Haba, the orphaned chimpanzee he helped return to the wild, and paying tribute to Janis Carter, a scientist who helped to establish chimpanzee monitoring and LAMIL’s biodiversity programme.

Camara is now an ardent conservationist. “It’s important to protect the forests,” he says. “Nearly all of us are farmers, and we need water for our crops, but the water will only continue to flow if the forests are in good condition.”

A survey in Nyalama suggests that the conservation activities undertaken during the LAMIL project had a significant impact on the hydrology of the forest. Before the project began, eight out of 19 springs had a regular flow of water. By the time the project came to an end, 12 were flowing regularly.

The starkest proof that forest cover has increased comes from large-scale satellite photographs taken for the United States Geological Survey. Images of Balayan Souroumba Forest show a dramatic increase in tree density between 1967 and 2008.



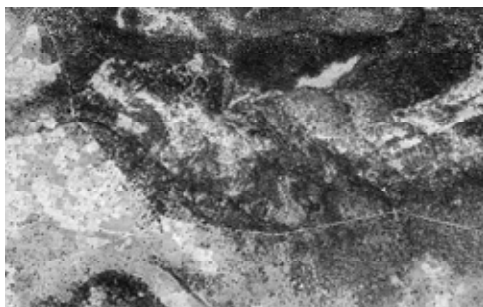


There was also a significant decrease in agricultural encroachment over most of the forest. This contrasts with the images of adjacent areas, which show complete loss of dense forest and a decrease in medium-density woodland.

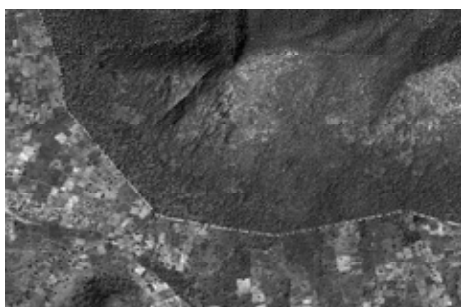
“The forests where LAMIL was working are in a better state than most of the other classified forests in Guinea,” says Jordan Kimball of the United States Forest Service (USFS). “Their remoteness may be a factor, but there’s no doubt in my mind that fundamentally strong co-management systems are helping to protect them.”

In early 2009, Kimball walked into the heart of Balayan Souroumba Forest. He found significant stretches of closed-canopy forest, rich in primates, and saw many trees of enormous size. He was impressed by his guides, most of whom were local hunters. “These guys just loved co-management,” he says. “They were collecting seeds for the village nurseries and they were enthusiastic and knowledgeable about everything they saw.”

1967



2008



▲ Since 1967, tree cover in Balayan Souroumba forest has increased dramatically, thanks in part to the LAMIL project and its predecessors.  
(Photo © U.S. Geological Survey - USGS)



## 4. LOOKING TO THE FUTURE

Besides providing training to farmers, community organizations and others on a whole range of practical activities, from the domestication of trees to running nurseries and establishing democratic institutions, LAMIL also sought to create a cadre of expertise at the national level which should stand Guinea in good stead in the future. It helped to set up agroforestry courses in a number of universities – over 240 students had benefited by mid-2009 – and provided training in *in vitro* plant propagation at a biotechnology laboratory established by the project at the National Agriculture Research Institute (IRAG). Staff from the national extension service and DNFF also benefited from their association with the LAMIL project.

This is just the beginning, says Kourouma Christine Sagno, the director of DNFF, the government department responsible for managing Guinea's 156 classified forests. "Little by little, we plan to introduce co-management to other classified forests," she says. "LAMIL has provided a model for the future."

It is a measure of the success of the LAMIL project that USAID was prepared to provide further support for the World Agroforestry Centre and CIFOR to introduce co-management in forests on either side of the border between Guinea and Sierra Leone. Known as the LAMIL-transboundary activity (LAMIL-TBA), this began in 2008. The project focuses on a number of areas that have suffered from rapid population growth, declining soil fertility and widespread forest loss. The concept



▲ Over 240 students have benefited from the agroforestry courses established with the help of the LAMIL project.



of co-management has been enthusiastically embraced by government officials in Sierra Leone, as well as by the local communities.

“One thing I found striking during my last visit,” says Daniel Tiveau, CIFOR’s Regional Coordinator for West Africa, “was that people on both sides of the border see that they can learn from what’s happening in the neighbouring country. Guineans recognize that Sierra Leoneans are probably better at wildlife management and the Leoneans realize that they have a lot to learn from the Guineans in terms of forest management.”

According to Gregory Booth of USAID, other countries in Africa could learn from LAMIL’s experience too. “Co-management in Guinea is both unusual and important,” he says. “What makes it different from any other natural resource management activities I’ve seen in Africa is the legal contract, signed between forests communities and the government. This means there is a high level of accountability and expectation on both sides.”

Although the LAMIL project came to an end in 2008, the co-management regimes it helped to establish continue to operate effectively, with the full support of local people and local government. “The project ended before I arrived here,” says Mamadouba Camara, the sous-préfet in Bissikrima, “but as you can see, it is still alive and well.” People from other parts of the country frequently come to see what co-management means, in practical terms, in the nearby forests of Balayan Souroumba and Sincery Oursa. LAMIL has given rise to management practices, the sous-préfet says, which are having a real impact on the welfare of both people and forests. Others are keen to learn how it’s done.



▲ Gone but not forgotten. The project continues to exert a powerful influence on forest management.



## **Acknowledgements**

Thanks go to the many people who provided help and information during the research and writing of this booklet. Particular mention should be made of Terry Sunderland, Michael Balinga and Daniel Tiveau of the Center for International Forestry Research (CIFOR); Serge Ngendakumana and Harold Roy-Macaulay of the World Agroforestry Centre; Karouma Christine Sagnon, director of Guinea's Department of Forests and Fauna (DNFF); Amara Keita, Fernand Delacour and the LAMIL project staff in Conakry; Moustapha Donzo, the director of the National Agricultural Research Institute (IRAG) in Kindia, and his colleagues; Gregory Booth of the United States Agency for International Development (USAID); and Jordan Kimball of the United States Forestry Service. We also owe a debt of gratitude to all the villagers, extension workers and government officials who were so generous with their time in the field.

## **Other titles in this series:**

FARMING TREES, BANISHING HUNGER: How an agroforestry programme is helping smallholders in Malawi to grow more food and improve their livelihoods.

SEEDS OF HOPE: A public-private partnership to domesticate a native tree, *Allanblackia*, is transforming lives in rural Africa.

This booklet tells the story of a project that has had a profound influence on the management of four large forest areas in Guinea. The Landscape Management for Improved Livelihoods (LAMIL) project has done much to improve the welfare of local people. It has also benefited forests and wildlife. At the heart of the project's success has been a system of co-management involving local communities and government agencies. Developed by the World Agroforestry Centre, the Center for International Forestry Research and their partners, this is generating considerable interest in Guinea and throughout the region.

ISBN: 978-92-9059-259-4



**USAID**  
FROM THE AMERICAN PEOPLE

