

SUMMARY OF CASE STUDY – GUINEA¹

Executive Summary

Natural resources in general are major sources of wealth and power in West Africa. Additionally, large percentages of people in such countries as Guinea continue to use trees and their products as important sources of fuel, medicine, food, and fodder. Forests can be important sources of products for domestic consumption and generation of income by the rural population. However, there is little data on how forests and their products contribute to improving the livelihoods of poor households.

This case study examines the importance of forestry and forest products in Guinea at two levels: first, in the country's Poverty Reduction Strategy Paper (PRSP) as well as its National Forest Program (NFP) and, second, in a number of rural villages in a preselected zone to determine the importance of forests to the livelihoods of local populations. The overall objectives of this and the several other case studies executed under the Program on Forests (PROFOR) are to demonstrate the importance of forests in improving the livelihoods of the rural poor and ultimately, through development of a PROFOR poverty toolkit, to facilitate appropriate inclusion of forest-poverty linkages into PRSPs and poverty into NFPs.

Although the sample is small in this study, the results indicate that forests and forest products do provide a source of both income and nutrition—at different levels—for rural people and groups in the study zone, although the division of the flow of revenue or its use by the surveyed population is not clear. The study zone provides sufficient evidence that forests and forest products help sustain local livelihoods, but not enough (at least in this particular example) to “lift” people out of poverty. No specific “success stories” are identified (principally due to time and human resource constraints); however, examples exist in which forest products play a larger than normal role in alleviating poverty, even though they clearly do not serve as a driving force in this respect.

This study demonstrates that people's willingness and ability to involve themselves in forest management and production activities is clearly related to their need for forest products (whether for revenue or subsistence), as well as their access to, and the availability of, those resources. Other factors that determine the level of participation in forest management and collection of forest products include infrastructure, markets and market access, policies, and the ability to create sound and transparent enterprises.

¹ Original case study was prepared by Winrock International including Chris Kopp and Boubacar Thiam (September 2005)

Introduction

Interest is growing in the role that forests can play in alleviating poverty and reducing the vulnerability of the poor to household, economic, and environmental shocks. In particular, the importance of two policy instruments, PRSPs and NFPs, are considered to be effective means of promoting policies, programs, and projects that help poor families benefit more from forests. PRSPs have become the main mechanism for governments in least-developed countries and some middle-income countries for defining budget and policy priorities and discussing those priorities with the international community. NFPs play similar roles regarding forests.

To the extent that PRSPs fail to incorporate forest-related issues, these issues are unlikely to get the attention that they deserve in national efforts to reduce poverty and vulnerability. Several reviews of PRSPs and interim PRSPs to date have found that, although an increasing numbers of these papers refer to forests and forestry, these references tend to be rather superficial. Little analysis is undertaken on the role that forests currently play or could play in rural livelihoods, nor on the measures required to capture that potential. Efforts to monitor PRSP implementation have not reflected the full potential contribution of forests. No similar reviews have been done on the extent that NFPs have taken up issues related to poverty reduction; however, anecdotal evidence suggests that these aspects have also been weak in most NFP processes.

The overall objective of this case study for Guinea is to demonstrate the importance of forests to improving the livelihoods of the rural poor, and ultimately to facilitate appropriate inclusion of forest-poverty linkages into PRSPs and poverty into NFPs. Specifically, the principal contributions that forests and forest products make to the livelihoods (both subsistence needs and generation of income) of the local population in the survey zone (Sincéry-Oursa Classified Forest) are identified. In addition, the effects these benefits may have on conservation efforts and reducing rural poverty are considered, along with the constraints on local populations to increasing their dependence on and income from forests. This case study also will highlight the role that forests play in the PRSP for Guinea, and suggest areas for further improvement in integrating forests into the poverty agenda.

Background

Figure 1: Map of Guinea



Guinea, located in West Africa, is bounded on the north by Guinea-Bissau, Senegal, and Mali; on the east and southeast by Côte d'Ivoire; on the south by Liberia and Sierra Leone; and on the west by the Atlantic Ocean (figure 1). Covering an area of 245,857 square kilometers, the country's geography is generally flat along the coast and mountainous in the interior, with four geographic regions: a narrow coastal belt (Lower Guinea); the pastoral Fouta Djallon highlands (Middle Guinea); the northern savannah (Upper Guinea); and a southeastern rain forest region (Forest Guinea). The Niger, Gambia, and Senegal rivers are among the 22 West African rivers originating in Guinea, primarily in the Fouta Djallon highlands. Forest area (including savannas and woodlands) totals approximately 13,186,000 hectares, or roughly 53 percent of the total land area. A chain of eroded mountains running southeast and south from Senegal and Mali crosses the country toward Sierra Leone, Liberia, and Côte

d'Ivoire. The northern part of this chain reaches an altitude of 1,500 meters in the Fouta Djallon Mountains in Guinea.

Guinea's principal rivers are the Bafing (the upper course of the Senegal) and the Gambia, both of which rise in the mountains of the Fouta Djallon and flow northeast. Many smaller rivers rise in the Fouta Djallon and descend to the coastal plain, where they divide into many branches. The Niger and its important tributary, the Milo River, originate in Upper Guinea.

According to the 2002 census, Guinea's population, including refugees (mainly from Liberia and Sierra Leone), and foreign residents (mostly Lebanese, French, and other Europeans), is 8,444,559. The population of Conakry is 2 million. The annual population growth rate is 3.5 percent. Guinea has four main ethnic groups, of which the Peuhl (Foula or Foulani), Malinké (or Mandingo), and several small groups (for example, Gerzé, Toma) live in the forest region. Seven national languages are used extensively. Major written languages are French, Peuhl, and Arabic. See box 1 for more information on population characteristics in Guinea.

Government, Political, and Economic Conditions

Guinea is a constitutional republic in which effective power is concentrated in a strong presidency. The president governs Guinea, assisted by his appointed council of civilian ministers. District-level leaders are elected, but the president appoints officials to all other levels of a highly centralized administration.

Richly endowed with minerals, Guinea possesses an estimated one-third of the world's proven reserves of bauxite, large reserves of high-grade iron ore, significant diamond and gold deposits, and undetermined quantities of uranium. Guinea has considerable potential for investment and growth in the agricultural and fishing sectors, but Guinea's poorly developed infrastructure and rampant corruption continue to present obstacles to large-scale investment projects. Joint venture bauxite mining and alumina operations in northwest Guinea provide about 80 percent of Guinea's foreign exchange. The Guinean government adopted policies in the 1990s to return commercial activity to the private sector, promote investment, reduce the role of the state in the economy, and improve the administrative and judicial framework. However, corruption and favoritism, lack of long-term political stability, and lack of a transparent budgeting process continue to dampen foreign investor interest in major projects in Guinea.

Box 1: Population Characteristics of Guinea

Religions:	Muslim 85%, Christian 8%, and traditional beliefs 7%
Languages:	French (officially) and seven national languages
Education:	Eight years compulsory
Enrollment:	Primary school, 64.32% (male 78.71%, female 69.03%); secondary, 15%; and postsecondary, 3%
Literacy:	(Total population above age 15 who can read and write): 44.2% (male 58.74%, female 26.38%)
Health:	(Life expectancy for total population in 2002): 54 years Infant mortality rate: In 2002, 98/1,000
Workforce:	In 2002, 4.5 million, of which agriculture 76%, industry and commerce 18%, and services 6%
<i>Source:</i> Government of Guinea 2002	

In 2002, the IMF suspended Guinea's Poverty Reduction and Growth Facility because the government failed to meet key performance criteria. In reviews of this facility, the World Bank noted that Guinea met 100 percent of its goals on spending in targeted social priority sectors. However, this, together with spending on defense, contributed to a significant fiscal deficit. The loss of IMF funds and the pursuit of unsound macroeconomic policies have placed the nation's poor at greater risk. In 2003, the government spent more than 50 percent of its budget on military expenditures, while neglecting the country's infrastructure. Major roadways connecting the country's trade centers are in poor repair or nonexistent, slowing delivery of goods to local markets. Electricity and water shortages are frequent and sustained.

Inflation (the official rate) rose from 8.9 percent in 2002 to more than 15.4 percent in 2003. Climbing inflation, combined with the government's enforcement of price controls for certain commodities, have served to dampen interest in the private sector. Even stalwart foreign investors in the mining sector are hesitant about future investment.

Guinea ranks 157 of 175 countries in the world with respect to human development indicators, as listed in the United Nations Development Programme's 2003 Human Development Report. The agricultural and natural resource sectors, which currently employ 70 percent of the population and account for 40 percent of GDP, represent great potential for poverty reduction. Agriculture is the country's principal economic activity for both food and cash crops. The production system is characterized by subsistence agriculture and animal husbandry with very rudimentary agricultural practices. A large percentage of the population experiences food insecurity due to the limited means of production and poor crop yields, necessitating food imports. Additionally, of a cultivable land area of 7 million hectares, barely 16.7 percent is exploited. The sea and an abundance of rivers also afford Guinea a huge potential for a booming fishing industry. The fishing sector contributes considerably to job creation and supply of quality food (animal protein) for the population. The government's 2010 development strategy emphasizes reducing poverty through increased sustainable exploitation of these various subsectors.

Forest Resources

Guinea is moderately forested, but much of the original forest has been cleared, and the current forest cover is comprised of a high proportion of secondary forest. The largest tracts of closed forest are moist evergreen forests in the southeast, characterized by species such as *Guarea cedrata* and *Lovoa trichiliodes*. Remnant tracts of montane evergreen forests are found on the Fouta Djallon plateau, and semideciduous forests occur in riparian strips, especially along the banks of the Niger River. Mangroves and swamp forests occur near the coast, while savanna woodlands dominate Guinea's forest area. In the northeast, Sudanian savanna characterized by *Isobertinia doka* is naturally predominant. In other areas of cleared forest, regenerated mosaic "parkland" is dominated by *Lophira lanceolata* and *Daniellia olivera*.

Guinea has 156 classified forests (forest reserves), covering approximately 1,186,611 hectares. It also has two national parks (Haut Niger with 54,000 hectares, and Niokolo-Badiar with 38,200 hectares) and two biosphere reserves (Réserve de la Biosphère Nimba and Massif du Ziamas Biosphere Reserve). Most of Guinea's dense humid forests (situated at low and middle altitudes—that is, up to 1,500 meters in elevation) form parts of transboundary forests linked to Liberia and Côte d'Ivoire. The highest point in Guinea is Mount Nimba (1,752 meters), which is the site of the Nimba Biosphere Reserve, and where the three countries intersect. The forest-savanna zone represents the transition between savanna and forest proper. The closed forest is fragmented and disappearing as a result of bush fires and clearing. The deforestation rate is estimated at 30,000 hectares a year; the majority (26,000 hectares) occurs in the humid dense forest zone. Forest degradation is principally related to population pressure (compounded by the influx of refugees), clearing for agriculture, uncontrolled grazing, burning, and hunting. Illegal exploitation of timber and firewood is also a problem.

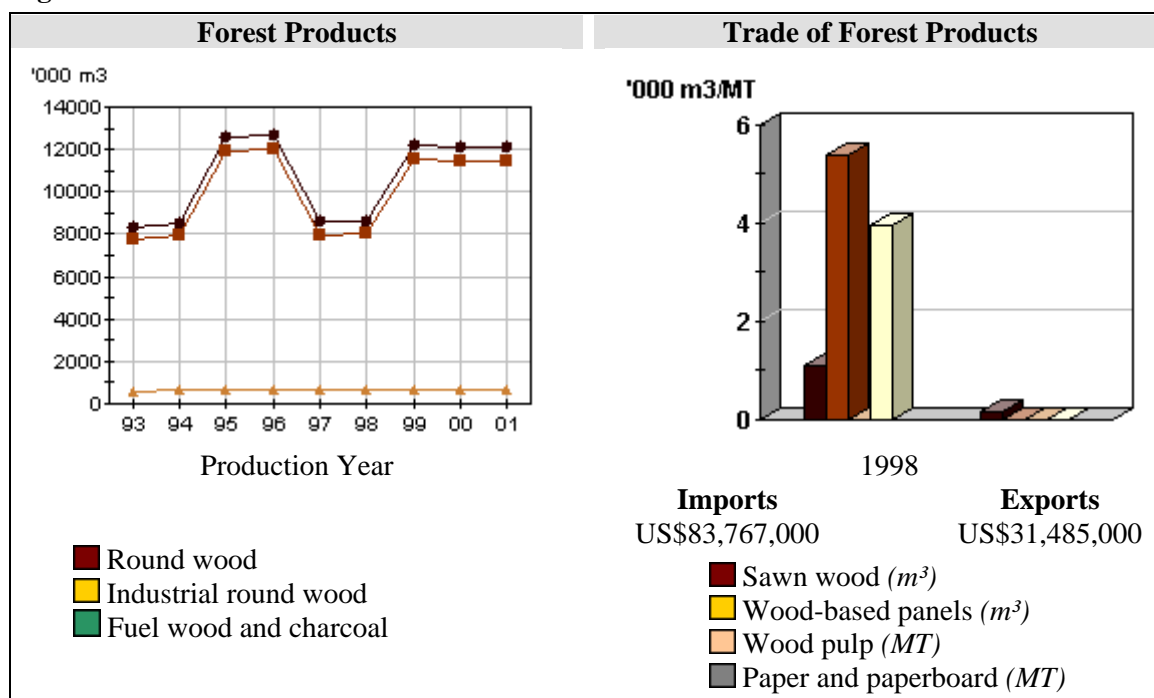
The National Directorate of Waters and Forests (Direction Nationale des Eaux et Forêts or DNEF) is legally responsible for managing all forests—national or otherwise—in Guinea. Although the French colonial regime classified most of these forests in the 1940s and 1950s, due to limited government resources they have received little active management. Many have become degraded due to years of wildlife poaching, uncontrolled animal grazing, and illegal encroachment. To stabilize and improve the condition of these forests, new management approaches are needed to ensure that they meet the national objectives of protecting watersheds and biological diversity, and providing needed forest resources. One of these approaches initiated in Guinea in 1992 is called "collaborative forest management" or "comanagement." The aim of comanagement is for the national government and local population to share the management responsibilities as well as benefits of the forest. These agreements resulted from five years of preparatory work, which included numerous studies of the forest, organization and training of local populations, preparation of a forest management plan, and a contract for implementing the plan. The U.S. Agency for International Development provided technical assistance, training, and other support

needed to develop this pilot approach. Although originally protected to conserve forest resources for future exploitation, classified forests are now important reservoirs of biodiversity and environmental capital. Recent Winrock International initiatives in Guinea have promoted a collaborative management approach to managing classified forests. Seven classified forests totaling more than 100,000 hectares are now under comanagement schemes in Guinea.

Forest Products and Trade

Guinea has significant hydro-power, fish, and timber resources, but timber and other wood products comprise only about 1 percent of all exports. As such, the Guinean forestry sector does not serve as a major contributor to the country's export earnings. Timber and fuel wood, however, do play an extremely important role in Guinea's domestic market. The country produces sawn wood mainly for domestic use, as well as poles and posts for agricultural purposes. Moderate volumes of logs are exported by Guinea, and modest quantities of wood and paper products are imported. Important non-wood forest products in Guinea include wild fruits, kola nuts, bush meat, and medicinal plants (especially chew sticks).

Figure 2: Forest Products and Trade in Guinea



Source: Food and Agriculture Organization (FAO). 2003. "Forestry." World Agricultural Information Centre.

Forest Policy and Legislative Framework

The establishment of the Second Republic (Guinea) in April 1984 led to a new awareness and recognition of the need for responsible natural resource management (NRM) (management of forest, wildlife, water, and soil resources).² By 1990, following the lead of other countries in the West African subregion, Guinea had developed a forestry policy reflecting the nation's attitude toward the future of its forestlands. Similar to efforts in other countries in the subregion, the DNEF attempted to transform itself from a "service of repression" to a service that works in collaboration with local populations. "Old school" military-trained forest guards are now rare, and many new forest agents have been trained in participatory methods.

The new Forestry Code made provisions for devolution of forest control to Guinea's elected rural councils, in which a state forestry service representative supports each elected committee. In 1996, the

² Much of the information in this section is drawn from Fairhead and Leach (2003).

ministry took a step further in permitting legal establishment of village woodlots and private forests. The national director of DNEF must sign a “dossier” of requests for establishing and managing these woodlots from the village group concerned. These groups are typically called *groupements forestiers* (or forestry groups). The dossier requires that those with specific customary tenure rights over parts of the forest are identified, have their forests mapped, and give their approval to transfer management rights to the concerned forestry group. The forest in question must be mapped and have a basic forest inventory and management plan, which shows a *zonation* to be agreed on in conjunction with the *chef de cantonnement forestière* (district forester). This typically would include priority zones for tree crops (such as coffee and oil palm), tree enrichment, water source protection, and timber exploitation. The *zonation* process also requires that the group create a management committee, which drives the process of formulating a village development plan that forest revenues can support. Before the plan is submitted to the national director for approval, prefectural representatives of many ministries must approve and sign it. Trees are the property of the group, and decisions to harvest them are made by the group management committee, although a formal request to the local forestry service is required. This will only be refused if it contravenes the previously approved forest management plan. Once a group has a permit, it can negotiate with a timber contractor to carry out the felling, and can use contractors who are not “approved” by the prefecture. Numerous donor-supported projects support creation of forestry groups, and to date the only groups created have been those that projects support. In particular, several projects within the huge Regional Niger River Basin Management Program, coordinated by the Organization of African Unity and funded by assorted donors, have promoted the approach within their areas of operation.

In carrying out its mandate with respect to promotion of sustainable NRM, and in line with the guiding principles of the nation’s forestry policy, DNEF, operating under the aegis of the Ministry of Agriculture, is specifically charged with the following aims:

- Protecting and restoring soil fertility
- Conserving soil and water
- Controlling erosion and brush fires
- Protecting, managing, and restoring forests, parks, and reserves, and regulating their use
- Protecting wildlife and regulating hunting
- Promoting establishment and maintenance of greenbelt areas
- Conducting forestry experimentation programs
- Managing watersheds
- Combating the effects of drought and desertification
- Ensuring the policing of forest areas to prevent brush fires and protect forest resources and wildlife

Guinea’s forestry policy objectives are grounded in six underlying principles, namely:

- Ensuring the sustainability of its renewable natural resource heritage
- Protecting and managing areas set aside as permanent forestlands
- Employing “best practices” that yield record products and benefits for an indefinite period
- Bolstering and regulating all aspects of the harvesting, processing, and marketing of forest products
- Getting government, business, organizations, associations, and all local communities closely involved in forestry policy
- Ensuring the effective use of corresponding policy instruments

In keeping with these policy guidelines, the government perceives forest management as an integral part of the incontrovertible need to utilize forest resources in furtherance of the national development process through sound resource management for the benefit of the public at large. In turn, this will provide essential goods, strengthen food security, supply business with capital goods, create jobs, protect the environment, ensure lasting biodiversity, and improve farming and living conditions.

Guinea's Forestry Action Plan

The main objectives of Guinea's 1985 forestry action plan include the following:

- Safeguard and ensure the success of previous forestry-related activities
- Strengthen the capabilities of the National Water and Forestry Administration through restructuring, training, and manpower development efforts, and by improving the administration's technical skills and knowledge in this area
- Clearly demonstrate the potential and interest of a well-coordinated, aggressive action program in the forestry sector in furtherance of the national development process

The action plan places top priority on forest management, protecting and improving ecosystems in general and wildlife in particular, fire management, soil and water conservation, managed timber production, and non-wood product development. Other important activities identified include strengthening ties of cooperation between DNEF and other agencies and organizations and local skill-building efforts (drawing on community leaders and local traditions to involve local communities in NRM schemes.)

Guinea's forestry policy framework as outlined in the action plan includes the following:

- Effective inclusion of forest resources in land-use planning activities (protection of remnant closed forests, designation of large tracts of each of the country's four natural regions as forestland, fallow enrichment, and effective range management in rural areas)
- Implementation of measures designed to combat plant predators and land degradation (fire management, watershed protection, improved farming methods, and regulation of logging activities)
- Conservation of ecosystem resources and diversity (protection of plant and wildlife resources through regulatory measures, establishment and equipping of natural reserves and national parks, and so on)
- Ensuring the sustainability of the resource
- Protecting and managing areas set aside as permanent forestlands
- Employing "best practices"
- Improving and regulating all aspects of the harvesting, processing, and marketing of forest products
- Getting government, business, organizations, associations, and local communities closely involved in forestry policy
- Ensuring the effective use of corresponding policy instruments

Guinea National Forest Fund

The resources of the Guinea National Forest Fund ("Fonds Forestier") are intended for development of the forest domain and to assist with implementation of the national forest policy. The first version of the forestry fund law, created in 1989 and decreed in 1993, states that the fund is to be a special account, endowed with accounting and budgetary autonomy. The fund consists of receipts from products that come from the exploitation of state forests, taxes and fees from application of the forest laws, fines and penalties, sale of confiscated items, net profits of public wood-processing enterprises, fees paid to the forest service for services rendered, and loans or donations from the state or international organizations.

The decree of 1993 is still in effect, pending issuance of a new decree under the 1999 law. The proposed changes include establishing a management committee for the fund, consisting of representatives from many ministries. This committee is supposed to approve internal rules and the fund's annual budget, and authorize entrance into contracts. Changes also include rules on how often the committee meets, powers of the officers, and voting. Issuing of rules governing the fund is the joint responsibility of the minister of forests and the minister of economy and finance. A special committee, with representatives of donors and the management committee, supervises the expenditure of funds from international sources.

Guinea's PRSP

This PRSP (Guinea 2002) was approved in January 2002. The main strengths of this PRSP are (a) its basis in Guinea's participatory and consultative processes, which have led to a genuinely country-owned strategy, (b) its relatively thorough poverty diagnosis, despite the limited availability of recent data, and (c) its comprehensiveness in that it focuses on accelerating growth, increasing access to basic services, improving governance, and strengthening institutional and human capacity as central priorities for poverty reduction. The three main focuses of the strategy are boosting economic growth, developing basic services and equitable access to such services, and improving governance and institutional and human capacity building.

In line with commitments undertaken in the interim PRSP in 2000, authorities executed a comprehensive plan for preparation of the full PRSP. To this end, the government established (a) an interministerial committee chaired by the minister of economy and finance to oversee preparation of the PRSP, (b) a permanent PRSP secretariat, and (c) nine thematic groups. The nine thematic groups are (a) macroeconomic framework and growth-oriented sectors, (b) private sector and employment, (c) basic infrastructure, (d) rural development and environment, (e) gender, population, and development, (f) social sectors, (g) governance, decentralization, and capacity building, (h) communication and culture, and (i) monitoring and evaluation (IDA and IMF 2002).

The implementation of the PRSP is to occur in three phases: Phase I (2001–03), Phase II (2004–07), and Phase III (2008–10). Phase I focused on measures for public enterprise reform; improving tax and budget policies, monetary policies, and reform of the financial system; subregional integration; improving basic services such as water, electricity, and transportation; and support for growth sectors: agriculture, mining, tourism, and craft industries. In an April 2004 report (Guinea 2004), medium-term overall goals were to increase incomes, reduce inflation, and improve health and education services. The ongoing civil conflict along Guinea's border with Liberia and Sierra Leone (2000–04) significantly affected the national budget, which resulted in an increased national budget deficit. Other factors such as increases in price of petroleum products and lower prices for bauxite and cotton also contributed to significant shortfalls in short-term PRSP objectives. In terms of infrastructure improvements, increases were realized in the energy sector, people's access to potable water, and improvements in transportation.

PRSP Development Process

Regional grassroots consultations (group meetings and workshops) were held in March 2000 to obtain a better grasp of the concept of poverty. The participants in these consultations were chosen from the poorest and most vulnerable population groups, including women from rural areas and slums, dependent women, street children, unemployed graduates, the handicapped, people living on fixed incomes, and pensioners. Discussion topics included how these population groups perceive poverty in their daily lives.

The concept of poverty encompasses vast life issues; some are quantitative in nature (income levels, for example), whereas others are essentially qualitative (access to basic services). Consultations revealed that these people perceive poverty in terms of lack of jobs and low income levels, limited access to basic social services (for example, education, health), poor quality of public services, exclusion of the handicapped, inadequate basic infrastructure, scant participation in decision making, and others. These perceptions of poverty have affected the approaches adopted for consideration and preparation of the PRSP.

Farmers in the subsistence food crop subsector appear to be the least well off. This group alone accounts for 68 percent of the poor. Farmers overall represent 61 percent of the population, but more than 80 percent of the poor. These results underscore the need to focus on development of the agricultural sector, and rural areas in general, in any undertaking intended to reduce poverty. According to the PRSP, the poor earn most of their income from agricultural work (almost 67 percent) and jobs in the informal sector. They devote nearly 62 percent of their household budget to food, and a marginal share to medical care and education of their children.

The overall objective of the strategy, as defined by the target population groups, is a significant and sustainable reduction in poverty in Guinea. The specific objectives underpinning this reduction of poverty stem from the leading concerns expressed during the grassroots consultation process. These include increasing incomes, improving health, increasing education, and generally improving the living conditions and prospects of the population, particularly the poorest people.

Inclusion of Forestry and Forestry Issues in the PRSP

The inclusion of forestry and forestry issues in the PRSP falls under the theme of rural development and the environment. One of the key challenges for the PRSP's NRM and environmental strategy will be to make the best use of existing potential to improve living conditions, while ensuring the sustainability of the productive base. While successful economic development in Guinea must rely heavily on the rural and mining sectors, more intensive activities in these sectors raise real questions about their impact on development potential, as well as on the environment. For example, farming methods and techniques, such as shifting cultivation, slash and burn, and hillside farming, already constitute a constant threat to the productive base.

The government's forestry policy must contend with many institutional and legal obstacles, including inadequate territorial, financial, and tax decentralization. A lack of implementing decrees for the Forestry Code means that the status of community and private forest holdings is still unclear under its provisions; there also is an unclear division of roles in managing and using forestry resources among general government entities exercising delegated authority, decentralized structures, and traditional institutions. Given these constraints, continued support and encouragement for these issues from the donor community is essential if progress is to be made in reforming forest sector policies.

Ensuring the sustainability of the productive base. Conservation of the productive base will be a constant concern in Guinea's development policy and will be present in all activities affecting natural resources (see box 2). In light of the threats to Guinea's forestry resources, specific actions are planned to improve forest management, including promoting public participation in the creation, development, and management of community and private forests; promoting the emergence of private-sector players in the development of wood- and wood byproduct-processing plants; enhancing the reporting, inspection, and monitoring systems for the sector; and improving incentives through more lawful and efficient mobilization and use of revenues from forestry activities. With this in mind, the government's forestry policy is also intended to implement a financing mechanism that is adapted to the forestry production cycle; an efficient control and monitoring system for harvesting, processing, and marketing forestry resources and wild animals; and equitable distribution of forestry development actions and programs.

Environmental protection. The priority for environmental protection will be a nationwide program for inventorying of and monitoring Guinea's natural environment, covering biodiversity and ecosystems, as well as Guinea's social and economic environment. Although no timetable is set, the government will also launch a program to prevent and manage natural and manmade disasters. Environmental impact studies will be conducted for all major national projects, especially in the mining sector. Other important measures that public authorities will introduce include capacity building at the national environment directorate and setting up an environmental information and management system to establish benchmarks for monitoring the impact of new projects.

A review of the Joint Staff Advisory Note from August 2006 indicated a lack of explanation as to what has been achieved in forestry in the PRSP's second Annual Progress Report from January 2006³.

³ Information added by editor

Box 2: PRSP NRM and Environment Strategy

Overall Goal: Protect Guinea's Natural Potential

Objectives

- Protect water sources and reserves, catchment areas, soils, forests, and vegetation
- Promote sustainable participatory approaches to natural resource management

Activities/Strategies

- Adopt laws and regulations, especially on environmental assessment, to establish benchmarks for environmental protection
- Establish monitoring systems to guide mining activities, protect coastal areas, and ensure sustainable use of forest resources
- Adopt and enforce a community-based management and protection plan for the Fouta Djallon region
- Develop natural resources
- Bolster cleanup operations
- Update and implement national environmental action plans
- Increase access to information regarding laws and regulations
- Increase access to information regarding the national environmental action plan
- Promote participation of local people in natural resource management
- Define benchmarks and develop tracking systems

Source: Poverty Reduction Strategy Paper: Republic of Guinea, 2002

Introduction to the Case Study

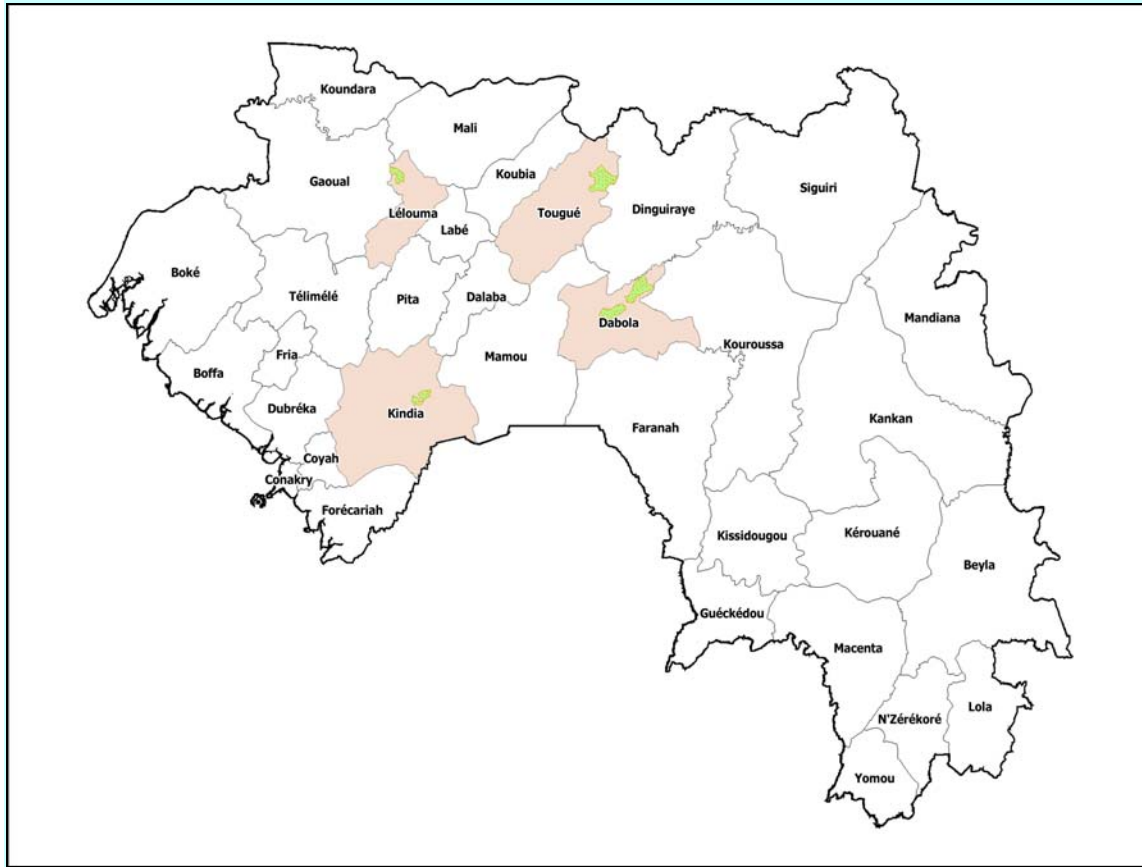
Research Area

The Sincéry-Oursa Classified Forest, located in central Guinea, and selected surrounding village communities was the area of focus for the case study (figure 3). The total surface area of the forest is 12,842 hectares.

Fifteen villages participated in the study, composed of either the Malinké or Peuhl ethnic groups, or a mixture of the two. The villages are for the most part located on the periphery of the forest and, depending on their location, their livelihoods more or less partially rely on the forest's resources. Some of the communities are actually located within the forest.

The Expanded Natural Resource Management Activity (ENRMA) began working in 2002 with DNEF and local populations inhabiting the periphery of the Sincéry-Oursa Classified Forest to develop a comanagement plan for the forest. The project and DNEF completed the management plan in 2003, which was later approved by U.S. Agency for International Development and the government of Guinea. The overall management goal of the plan is to promote sustainable economic development and alleviate poverty through responsible NRM, and to promote the regeneration of and protect the biodiversity within the classified forest. Three principal project activities currently occur within the forest: collection and transformation of the shea butter nut, limited agriculture activities, and creation of small credit and savings institutions using monies collected from forest user groups.

Figure 3: Location of Sincéry-Oursa and Other Classified Forests in Guinea



Source: Expanded Natural Resource Management Activity (ENRMA) 1999-2005, USAID/Guinea, Winrock International

Social Organization

Like many villages throughout Guinea, village institutions in this area combine elements of modern and more traditional institutions.⁴ Participating villages thus all have sector chiefs and district presidents who play an active role in administrative and social affairs. However, existence of these new administrative structures and officials has not diminished the importance of the “village chief” in Malinké villages. This is an inherited title held by the oldest male in the village or by the eldest male in the village’s founding clan. The *imam* plays an especially important role in Peuhl villages. The *douti* in Malinké villages and the *jom leydi* in Peuhl villages also continue to play an active role in local social affairs. They are, for example, consulted on all matters involving access to land. Village elders or wise men also still play an important social role.

Ties among certain villages are closer than among others due to their geographic proximity and similar ethnic origin; however, most of the aforementioned villages and sectors are independent of surrounding villages and sectors. Peuhl villages, for example, are completely independent of Malinké villages, and have the same standing, despite the fact that they are the minority group in this region and tend to have settled in the area after their Malinké neighbors. The theft of livestock is becoming an increasingly serious problem due to the area’s proximity to a large urban population center. As a result, herders are less and less inclined to send their animals off to graze in the Sincéry-Oursa Classified Forest.

A gender analysis of poverty (conducted during the PRSP process) demonstrated sizable disparities, to the disadvantage of women. Case study findings also indicate this trend in the study area. Women in agriculture have a workload ranging from 15 to 17 hours a day, and their work is made more onerous by a

⁴ This information is drawn from Winrock International/DNEF (2003).

lack of tools, low degree of processing of food products, and distances to water points and sources of firewood. In addition, although they account for nearly 80 percent of the country's food crop production, women have only limited access to credit and land tenure.

Methods

The survey team was directed by a senior Guinean consultant with considerable experience in survey research, as well as work on a variety of NRM and forestry issues in West Africa. The data collection involved approximately four weeks of fieldwork, with surveys carried out in October 2004. Surveyors spent two to three days in total per village. The initial survey was conducted in one to two days, with follow-up visits to corroborate initial findings. Surveyors included selected personnel from local nongovernmental organizations collaborating with ENRMA, as well as professionals who participated in the PRSP surveys. All were fluent in the local language and familiar with forest, poverty, and rural issues. A week was spent field testing the semistructured questionnaire to refine its contents.

In addition to the semistructured questionnaire, data collection methods included in-depth, semistructured interviews, informal conversational interviews, open-ended interviews, focus group discussions, open community meetings, direct observations, and participatory rural appraisal (PRA) techniques such as mapping, diagramming, and ranking. Groups targeted for data collection included national-level government officials involved in the PRSP process (DNEF, Ministry of Agriculture, Ministry of Finance and Economic Planning). Additionally, regional and local-level forestry officials and community leaders in selected communities were interviewed. Data was also collected from key community groups and associations, such as, forest user groups, women's groups, and youth groups. Households and individuals were also surveyed.

The main areas of data collection included the roles of forests and trees in meeting the subsistence and income needs of local people. In addition to determining the relative proportion of forest products marketed and used for household use, the economic value of forest products as a percentage of overall family income was estimated. Data was collected concerning the system of land tenure and right of access of local people to planning, management, and use of forest resources. Assessments were made of levels of poverty and local people's perspectives on changes in livelihoods and impacts of activities on conservation of the forest. In general, a vision of those interviewed on the future status of the forest and the benefits of forest products was sought.

Land Tenure Aspects

The majority of people interviewed for this case study said that they owned the land they are farming. Ownership is gained principally through clearing the land and farming it, but also through inheritance, borrowing, gifts, and purchase. These same interviewees also claimed that they own the trees that are found on their land and, therefore, can harvest them for their own personal use. For timber uses, however, even if the trees are on their farm, they need to pay a "harvest" tax (*permis de coupe*) to the local representative of the national forestry administration in order to cut the trees.

Local households have secure land tenure rights and farm their lands year after year, and are recognized and respected as the holders of these rights. Both women and men grow crops on fields outside the forest area. By marriage, women have access to part of the lands held by their husband's family. Both men and women produce crops for household consumption and, to a lesser extent, for market. In the majority of cases, men are in charge of marketing the crops; however, a good number of women also alluded to the importance of this activity as a source of income. The village *douti*, or land overseer, is consulted by villagers wishing to plant crops on a new parcel of land, for the settlement of land disputes, and by newcomers requesting permission to farm a parcel of village land. The *douti* has no control over lands already being farmed by local villagers, nor does he have the authority to redistribute village lands.

The study found no "forest dependents" that is, people who depend solely on the forest and its products as sources of sustenance and income, in the villages included in this case study. This is in comparison to "partially dependent" people who derive a greater portion of their income from agriculture, but might

depend on the forest for certain products. Agriculture is clearly the major source of livelihoods and principal source of income.

Constraints to land and forestry codes are directly related to insufficient information and inadequate dissemination of the codes to the rural population. Most of the respondents depend on local representatives of the forest service for this information or, where ENRMA was working, were informed via project personnel. Most respondents were aware to a degree of some of the basic regulations, such as avoiding cutting down certain species of trees when clearing land for farming (for example, *nééré* and shea nut), not cutting trees adjacent to streams or rivers, and avoiding burning agricultural fields (thereby lowering the opportunity of wild fires) in the dry season.

Current Forest Use and Income Generation

Local Forest Use

The local population is engaged in a wide variety of agriculture- and forest-based activities, either in or around the classified forest. The main activities conducted inside the classified forest include farming, collecting honey, hunting, raising livestock, and harvesting bamboo, firewood, lumber, timber, lianas, fruits, shea nuts, carob beans, wild yams, straw, raffia fronds, and medicinal plants. Of these activities, respondents in 55 percent of the villages taking part in the research mentioned collecting honey, cutting bamboo, and hunting, whereas residents of 50 percent of the villages collected shea nuts, 32 percent harvested straw, and 27 percent harvested lianas. Respondents in 41 percent of the participating villages farmed a variety of different crops, and those in 32 percent of the villages raised livestock. Other activities were less common. According to the study data, the extraction of non-wood forest resources and farming clearly lead the list of activities conducted inside the forest. Harvesting of bamboo is unquestionably the most common activity based on the use of wood resources. Respondents in more than 70 percent of the villages alluded to the importance of this activity. Harvesting of bamboo is just as important for men from villages that are more distant from the classified forest, as for those forming the so-called “inner circle” around the classified forest, all of whom have with time stepped up their use of this forest resource.

Virtually all activities conducted inside the classified forest are also engaged in outside the forest area. Respondents mentioned at least one farming activity (i.e., involving an annual crop) in 91 percent of the participating villages. The working of plantations and growing of vegetables are examples of other activities conducted in areas mainly outside the forest area. Harvesting of straw and collection of honey are activities respondents mentioned in 45 percent of the villages, and respondents mentioned collection of carob beans and a variety of other non-wood products, along with grazing, as important activities engaged in outside the forest area in 41 percent of the villages.

From a historical perspective, most local villagers felt that the use of many forest resources has increased dramatically with time, although this is not true in all cases, particularly hunting, collecting honey, harvesting of wild yams and carob beans, and raising livestock (the latter’s importance has diminished in the past 50 years). On the other hand, the forest has become an increasingly important source of bamboo, firewood, timber, lumber, shea nuts, *Saba senegalensis*, dry grasses, and lianas. Farming of all types of crops has increased. Activities that all respondents most frequently mention as potential future income-producing activities are planting cashew, pineapple, avocado, cacao, banana, coffee, kola, coconut, mango, orange, lemon, and palm tree plantations, and growing calabash, ginger, cowpeas, potatoes, maize, and millet.

Principal Income-Generating Activities

Survey results indicated that the principal income-generating activities in the study zone are agriculture and the sale of trees and other forest products. Other non-forest sources of income include herding, local commerce, arts and crafts (including handcrafts, blacksmithing, mortar making), and transportation.

Agriculture. Farming provides 40 to 75 percent of family income. Families and individuals with higher percentages of farming income have more land available for cultivation and plant crops with higher market value (that is, they may have more disposable income to purchase high-quality seed or have the means to store seed effectively). Harvested crops are used for family consumption and seed for the following year, and 15 to 30 percent are sold to cover basic necessities such as school fees, medicine, or farming expenses. The main agricultural crops in the study zone, as a percentage of total farming income, are peanuts (40 percent) and rice (30 percent), followed by corn, manioc and other crops, at 10 percent each.

Trees and Forest Products. Villagers derive up to 25 to 30 percent of their income from collecting and selling forest products. Tables 1 and 2 summarize the survey findings. Additional information collected indicates potential income from other products found in the zone. Charcoal fabrication from local production methods can produce 10 bags of charcoal a month, which, at 3,000 GF per bag, generates 30,000 GF a month. Selling 10 25-kilogram bundles of firewood a month, at 1,000 GF per bundle, generates 10,000 GF a month. Mortar makers (*fabricants des mortiers*) can produce 10 mortars a month, which at 8,000 to 10,000 GF each, generates 80,000 to 100,000 GF a month. The income generated from forest product collection and sale is used in the same manner as income from agriculture.

Table 1: Zone-Specific Forest Product Information: Collectors, Users, Uses, and Importance

Trees and forest products	Principal collectors	Principal users	Uses	Degree of importance
Timber	Men	Men	Roofing, furniture, and sale	Very important
Firewood	Men and women	Men and women	Firewood, charcoal, and sale	Very important
Wood for domestic use	Men	Men	Fencing and construction	Important
Shea nut	Women	Women	Family consumption, sale to purchase clothes, shoes, utensils, and drugs	Very important
<i>Parkia biglobosa</i> (<i>néré</i>) seeds commonly a source of protein (West Africa)	Youth/men	Women	Family consumption, sale to purchase clothes, shoes, and utensils	Very Important
Straw (<i>paille</i>)	Men	Men	Roofing	Important
Bamboo	Men	Men	Roofing and fencing	Very important
Rope (<i>corde</i>)	Men and women	Men and women	Roofing and fencing	Important
Honey	Men	Men and women	Family consumption and sale	Very important
<i>Saba senegalensis</i> (<i>madd</i> , a type of fruit commonly found in West Africa)	Youth	Youth, women, men	Family consumption and sale to purchase personal items	Very Important
Raffia	Men	Men	Construction of wooden beds and desks	Important
Pharmacy/medicines (includes leaves, bark, roots, and so on)	Men, women	Men, women	Medicines	Important

Source: Authors' compilation.

Table 2: Income from Selected Forest Products

Forest products	Percentage	Quantity produced		Annual income (GF)	
		minimum	maximum	minimum	maximum
Shea butter	40–65	10 liters	50 liters	85,000	125,000
<i>Néré</i>	10–25	10 kg	20 kg	8,000	30,000
<i>Saba senegalensis</i>	10–25	7 bags ^a	15 bags ^a	90,000	140,000

^a. 50 kg each.

Source: Authors' compilation.

In some villages, some employment opportunities exist in forestry such as forestry groups, shea butter, handicrafts, carpentry, and blacksmithing. Some villagers believe that fruit tree planting is an opportunity that should be encouraged. No formal forestry enterprises exist in the zone of the study. However, creation of informal community-based groups (for women, youth, and men) exist in many villages, most notably where donor-funded projects or local nongovernmental organizations encourage them. Forest products are generally sold in weekly markets, although no formal markets exist exclusively for forest products.

Outsiders have come to play an increasingly important role in the use of virtually all forest resources (except hunting). This is especially true regarding their share of firewood and timber resource use, harvesting of shea nuts, and collection of *Saba senegalensis*. Residents of one village maintain that outsiders have dramatically increased logging activities in the forest in the past 18 years. In almost every village surveyed, nonresidents do collect forest products such as *néré*, shea nuts, bamboo, straw, timber, firewood, rope, and *Saba senegalensis*. These nonresidents are often from neighboring villages in the prefecture of Dabola and harvest these products for local consumption or sale.

Men and women tend to use natural resources differently, thus, it is not surprising to see men and women from the same village using different natural resources. For example, in Sincéry-Oursa, the main activities mentioned by males are collection of honey, harvesting of bamboo and lianas, hunting, livestock raising, and farming. Women, on the other hand, give top priority to collecting firewood and gathering wild plant foods, particularly shea nuts. The use of these resources in income-producing activities is more numerous (28 percent) for men than those engaged in by women (15 percent), and clearly reflect the differences in their use of forest resources. Male respondents most frequently cut bamboo, collect honey, and farm various types of crops, in that order. Both men and women harvest fruit from the principal fruit trees found in the zone—mango and orange trees. About one-third of the fruit is consumed by families and two-thirds is sold. In one season, the average fruit tree owner can make up to 20,000 GF from the sale of these products.

Selected forest products are subject to taxation by DNEF, however, the tax “capture” rate is fairly low given the inability of the undermanned DNEF to cover the large expanse of rural area adequately. Forest products that are subject to taxes include charcoal, mortar, firewood for sale, and timber for sale. Forest products not subject to taxes include the following: *néré*, straw, shea butter, *Saba senegalensis*, and bamboo.

Perceptions of Wealth and Poverty

The survey's findings indicated that respondents define levels of wealth and poverty according to different characteristics (table 3, see appendix). In one of the villages surveyed, the poor define poverty as the incapacity to meet needs as the wealthy people do. Respondents also mentioned that the poor are poor because God wants it. In the villages, the poor were considered to comprise 50 to 65 percent of the population. The poor feel they could change their status by sending their children to school to help them out of poverty, gaining better health to be able to work, gaining access to adequate means of production such as improved seed and tools, and gaining access to farmland for rice production.

Conclusions

- As might be expected, the economy is based on agriculture, which is the principal driving force for revenue flows back to the communities. Depending on access to inputs and agricultural land, this can amount to as much as 75 percent of revenue flows. Around 25 percent of total income derives from the collection and sale of forest products—a significant percentage of total household income.
- Except for donor-funded forestry and NRM projects, local people generally do not have the opportunity to participate in land-use or forest-management planning exercises. Although a variety of factors contribute to this constraint, DNEF (as well as other government services) is generally extremely underfunded and understaffed, and cannot regularly visit and enlist the population in participatory forestry activities such as land-use planning. Aside from assignments to donor-supported projects with funding for supporting selected rural populations, DNEF field staff have little opportunity to collaborate with rural landholders on a regular basis.
- People’s willingness and ability to involve themselves in forest management and production activities is clearly directly related to their need for forest products, as well as the access and availability of these resources. Other factors that play determinant roles in the level of participation in forest management and forest products include: (a) infrastructure, markets and market access, policies, and the ability to create sound and transparent enterprises, (b) factors that inhibit increased forest product

Box 3: Guinea: Obstacles to Private Sector Development

“This situation (*lack of private sector development initiative*) means that the main obstacles to growth and a substantial reduction in poverty still have to be overcome. Part of the problem stems from the difficulties encountered in: (i) restoring a public service ethic conducive to private sector development, (ii) strengthening the administrative and legal environment, which is a prerequisite for a flourishing private sector, (iii) improving basic infrastructures, (iv) enhancing the effectiveness of support bodies such as chambers of commerce, industry, and agriculture; employers’ associations; the Private Investment Promotion Board; and the financial system, and (v) ensuring access to information and closer consultation between the central government and the private sector.”

Source: Government of Guinea 2002.

harvest and marketing, (c) lack of governmental services and low private sector involvement, (d) no formal markets, lack of market information, and no intermediate agents, (e) poor infrastructure and transportation services, and (f) the fact that people need to make money or obtain other clear benefits from natural forests or plantations to maintain them.

- Current practices, the legal framework, and safeguards for the extraction and sale of non-timber forest products (NTFPs) and timber must be understood to determine if changes are needed to ensure legally and socially defensible buying and selling relationships. Experience shows that it does not matter if good management practices are instituted and the right products are being removed in a sustainable manner, if a viable commercial system is not in place or lacks credibility and safeguards, people will lose the incentive to participate.
- In general, local populations in the study zone are poorly informed of their rights of access to land and resources (at least through formal governmental structures).
- The study revealed no developed formal markets, difficult market access, and no formal organizations in the study area. Much of the trade was very informal.
- Although the results of this study do not definitively conclude that forests and their products serve as a driving force to alleviating poverty in the study area, they do reveal that forest products provide an important source of income and nutrition to the majority of people interviewed. One question not resolved here: if they did not collect forest products, would they be worse off? The assumption that sale of selected forest products does provide significant societal benefits can probably be made in some instances. The division of the flow of revenue or the use of this revenue (from the sale of the forest products) in the surveyed population was also not clear. Did it merely augment their income? Were they able to use it to pay for items such as clothes, school fees, house building—, or things that

are beyond the basic necessities of life? The study did demonstrate that, where forest products were available, individuals and informal groups did generate revenue or consumed the products themselves.

Recommendations for PRSP Process

While the importance of protecting the natural resource base is outlined in the PRSP of Guinea, it is not clear from recent reports what has actually been achieved in the forestry area (Guinea, 2006)⁵.

Furthermore, despite the importance of forests to rural people, their potential as a means for economic development in rural areas is not emphasized in the PRSP. To get forests and forest products on the poverty agenda of West African countries such as Guinea, more specific planning is needed. For example:

- Improvements are needed in the capacity of the national forest service to collaborate with rural villagers to manage their natural resources in a sustainable and economically beneficial fashion. As part of the PRSP process, investment in capacity building and material support for the national forest service and local people is essential.
- Policy reform at the national level should facilitate and encourage not only NRM, but promote private sector development and facilitate and strengthen markets for those resources, and increase access to profitable markets by improving infrastructure and market networks and providing market incentives to local producers.
- An enabling environment should be created for development of user groups that are transparent and have the necessary organizational and technical skills to participate effectively in NRM and marketing of their products.

⁵ Information added by editor.

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Appendix

Acronyms

DNEF	Direction Nationale des Eaux et Forêts (National Directorate of Waters and Forests)
ENRMA	Expanded Natural Resource Management Activity
GF	Guinean franc
MT	metric tons
NFP	National Forest Program
NRM	natural resource management
PRA	participatory rural appraisal
PROFOR	Program on Forests
PRSP	Poverty Reduction Strategy Paper

Table 3: Wealth Ranking and Definition of Poverty

Categories	Characteristics	Percentage of the category within the population
Rich	<ul style="list-style-type: none"> • Has good land for farming (1–6 ha) and makes a good harvest (e.g., 30–40 bags per year of rice, 4–6 bags of corn, and/or 25–30 bags of peanuts) • Has food during 12 months of the year to feed family • Has 10–50 domestic animals (cows, sheep, and/or goats) • Has big family (1–4 wives and many children) as labor • Has means of transportation (motorcycle or bike) • Is healthy • Has a concrete house • Is able to pay school fees for children • Can afford to buy medicine for family • Has many internal and external interpersonal relationships 	5–10
Middle rich	<ul style="list-style-type: none"> • Has at least 2 ha of land • Has one wife • Has food for most of the time in a year • Has a few domestic animals • Does not have a means of transportation • Cannot cover all the school fees for children • Cannot afford to buy drugs for family • Does not have any savings 	20–35
Poor	<ul style="list-style-type: none"> • Has someone who is sick in family • Does not have enough food on daily basis • Barely meets needs • Does not own land • Is illiterate • Does not have any interpersonal relationships • Does not have a wife • Lacks courage and initiatives 	50–65
Chronic poor	<ul style="list-style-type: none"> • Has someone in family who is mentally ill or blind • Has no possessions • Depends on other people to live • Lacks motivation • Is handicapped • Is leprous 	10–40

Source: Authors' compilation.