

CHAPTER 9

ALLOCATION AND USE OF FOREST LAND : CURRENT TRENDS, ISSUES AND PERSPECTIVES

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1. Introduction

Facing on one hand the challenges of growth and development, and on the other a need to sustainably use natural resources, the countries of the Congo Basin are at a crossroads. To meet these challenges, national policies are relying on the exploitation of natural resources and the expected increase of public revenue (CEA, 2010). The national economies are in effect heavily dependent on exogenous income and income generated from natural resources (Philippot, 2009). The latter account for a large part of government revenues: 26.8 % in DRC; 28.6 % in Cameroon; 53.9 % in Gabon; 67.6 % in Chad; 79 % in Congo; and 88 % in Equatorial Guinea (FMI, 2012).

The industrial and commercial use of the earth's natural resources profoundly affects how land is allocated and the land use schemes under development (Schwartz *et al.*, 2012). Biodiversity conservation, the development of large infrastructure projects, and the implementation of land use planning schemes furthermore influence each other. In other words, the search for livelihoods at the local level, growth, development, biodiversity conservation, and land use planning are correlated and form an indivisible whole (Hagen *et al.*, 2011; Angu *et al.*, 2011).

This chapter addresses the question of land allocation and use and the sustainable management of natural resources, notably forests and biodiversity, in a sub-region engaged in fighting poverty and confronting the challenges of good governance (Oyono, 2013a). It seeks to transpose these issues onto the field of policy development. The main concepts related to forest land use planning are presented in the first section of the chapter. The second section identifies the breakpoints between the past and present concerning the way land is used. The third presents a general overview based on "country cases". The fourth section describes the externalities in play since the beginning of the 2000s, particularly with the massive engagement of new actors. The last section addresses the prospects for land use planning in relation to sustainable forest management and biodiversity conservation.

2. Conceptual clarification

The concepts normally associated with planning the allocation and use of forest land generally refer to the notion of a cadastre (Cauquelin, 2000). These conceptual categories often are blurry or poorly understood: land use, land allo-

cation, land cover, classification of forests, forest zoning, etc. The following seeks to clarify some of these concepts (Sidle *et al.*, 2012).

Box 9.1: Land use planning

Land use planning is a process by which stakeholders (local community members, traditional authorities, government representatives, private sector actors, scientists, etc.) come together to discuss and determine how to manage the resources of a given geographic area for future generations [...]. If carried out in a participatory manner, zoning is an excellent land use planning process. [...]

Most countries in the sub-region have developed national zoning plans, but these are often incomplete. In the conservation landscapes of the Congo Basin, there is, however, much to be learned from land use planning processes. Using the appropriate methodologies, such processes outline a vision of space in zoning operations that define macro and micro-zones. Macro-zones are vast geographic areas (protected areas, community agro-forestry areas, extractive concessions, etc.) which often are split into different land use micro-zones depending on the management plan.

Source: Adapted from Sidle et al. (2012) and authors.



Photo 9.1: Trees planted in former farm plots

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Land use: land use practices implemented by human societies for diverse socio-economic activities. These practices may lead to changes in ecosystems, biological diversity, and water and climate cycles. To maintain multiple environmental services and conserve biodiversity, some forest areas in the Congo Basin were classified as environmental protection and biodiversity conservation areas.

Land allocation: land-use selection practices for a specific purpose. The allocation is a result of a planning process involving all stakeholders: the government, local populations, private sector, civil society, research institutions, etc. Changes in land allocation influence the soil and micro-climate.

Land cover: physical land types. Mapping land cover allows a better grasp of the state, evolution and natural and/or anthropogenic dynamics of ecosystems and territories.

Classification: set of procedures used to place a forest into the private domain of the State. This classification is made through a regulatory act fixing the geographic boundaries and management objectives of this forest (production, recreation, environmental protection, biodiversity conservation).

Zoning: planning techniques used to designate areas for specific uses. It divides space into distinct geographic areas in a process of land planning, allocation and territorial development.

3. Disruption Factors (1990-2010)

The past decade has been marked by significant institutional developments and disruptions in local land use patterns (Hagen *et al.*, 2011). Although some of these changes are specific to certain countries or particular areas, many common factors are emerging across the sub-region of the Central African rain-forested countries such as policy reforms and the signing of international conventions (Oyono, 2009; Djeukam *et al.*, 2013). Many of these effects are the result

of pressure from the donor community while others are related to economic developments such as globalization, highlighting both the interconnectedness of the world and growing regional coordination. Policy, legal and institutional developments in effect since the mid-1990s strongly shape land use planning options and land use schemes, with both positive and negative impacts on sustainable resource use and conservation.

3.1 Forest and land policy reforms

Some of the most significant land use developments across the Congo Basin region over the last decade result from forest law reforms (Yangen *et al.*, 2010). In many countries, more elaborated forest management planning is now required and restrictions have been placed on the logging sector, at least nominally. For example, log export bans were put in place by Cameroon in 1999 and Gabon in 2010, while the Democratic Republic of Congo (DRC) suspended logging titles in 2002 (Putzel *et al.*, 2011). Although many of these legal revisions have moved the region towards more rational and sustainable forest management, oth-

ers have had mixed results and have in some cases opened new opportunities for corruption and nepotism. For example, management plans may be so complex that they are impossible to enforce with the technical capacity and resources available (Goncalves *et al.*, 2012). Another example is the growth of “artisanal logging” in the DRC since the moratorium on logging concessions. Much of the large-scale logging has merely been replaced by unpermitted companies and continues under the guise of local activities (Global Witness, 2012).

Box 9.2: Forestry reforms – the momentum is increasing!

The democratic transitions which have been under way in the Central African countries since the early 1990s constitute a key stage in their political-institutional evolution. [...] The constitutions have been revised to promote the legalization of political pluralism. Laws promoting political participation have been promulgated. [...] The CAR in 1990 and Cameroon in 1994 initiated a broad legal and administrative restructuring of the management of their forests. [...] For example, in Cameroon the new forestry legislation establishes the basis for a form of technical decentralization which transfers to the decentralized territorial and local communities, responsibilities for the management of forests and the financial benefits deriving therefrom. The Central African and Cameroonian initiatives have rapidly been replicated and new forestry legislation has been promulgated in Equatorial Guinea (1997), the Republic of Congo (2000), Gabon (2001), DRC (2002) and Rwanda (2005). The revision of the forestry act in Burundi dates from 1985; it therefore slightly preceded this overall trend.

Source: Oyono (2009)

At the same time, several countries in the sub-region adopted reforms or international commitments recognizing the tenure rights of forest communities. For example, the 2002 DRC Forest Code provides for legal recognition of local community forests and the possibility of community forest concessions. While these aspects of the law cannot yet be implemented because of delays in implementing the regulations, the law might signal a shift away from complete state management and control of forest resources. In Cameroon, the forestry law, which is currently under revision, provides for some local community forest

management, but the rights of communities are relatively limited and subject to government oversight. The Republic of Congo, meanwhile, passed legislation recognizing the rights of indigenous peoples to land and forest resources. Many laws include an increased recognition of the unique place for women and indigenous groups in the land use planning process (Wily, 2012). While the sub-region lags far behind other areas in terms of local community forest ownership and management, the increased civil society engagement in the reform processes over the past decade has opened more possibilities for local forest management and livelihoods improvement (RRI, 2012). Land reforms have also been a topical concern in the sub-region since the 2000s. While the Republic of Congo and Gabon have already revised some provisions of their land legislations, such revisions are also underway in Cameroon, the DRC and Central African Republic.

Over the past decade, several countries in the sub-region endorsed international commitments that, when implemented nationally, will affect how forests are managed. For example, the *United Nations Declaration on the Rights of Indigenous Peoples* and the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* increased the recognition of local community and indigenous peoples' rights to forestland. One initiative that has prioritized the involvement of local communities is the Central African Regional Program for the Environment (CARPE), led by the U.S. Agency for International Development (USAID). Through the framework of land use planning at the landscape scale introduced by CARPE with the focus on a multi-faceted approach to biodiversity conservation, commu-



Photo 9.2: Forest base camp – Moyen Ogooué, Gabon

nity rights, sustainable development, and the potential of ecosystem services, the involvement of local communities in forest management in the Congo Basin has greatly expanded (Yanggen *et al.*, 2010). Over the last ten years, more than

150 macro-zones have been defined in landscapes across Central Africa, and each one has been created by working directly with communities and governments at a local scale.

3.2 Global economic trends and their local impacts

Another major development over the past decade has been a broader international influence in the region. This international influence became more obvious during the global financial crisis of 2008, which led to decreased demand for wood and wood products in Europe and the subsequent departure of some of the major European forest concessionaires from the area (hastened by competition from illegal operators due to poorly enforced regulations). These departures, in turn, had reverberating effects at both the national and local scales. For example, a study of the effects of the global financial crisis in the Sangha Tri-National landscape showed that “global demand for timber decreased and this led to suspension of logging activities and lay-offs of staff by logging companies; both biodiversity and livelihood indicators deteriorated” (Sayer *et al.*, 2012). This and other similar studies and anecdotes are reminders of the interconnectedness of the world economy, even in some of the most remote and least developed locations.

The increasing influence of China in the region reflects this broadening international engagement in the sub-region. China has invested approximately \$ 0.7 billion in five of the Congo Basin countries (Cameroon, the DRC, Equatorial Guinea, Gabon, and the Republic of Congo), with the DRC accounting for over half of that amount (Engelhardt, 2010). For example, the Congo Basin has had notoriously poor infrastructure but with a renewed focus on improving road networks in the past decade, there have been several funding commitments from multilateral and bilateral sources, including China (Putzel *et al.*, 2011). The improvements that may result from this renewed focus are likely to hasten economic development but also to increase deforestation and forest degradation unless couched in a well-organized and managed sustainable development context.

The sharp rise in large-scale land acquisitions since 2000 and especially since 2007,

often referred to as the global land rush, has had important initial impacts in the sub-region. The acquisitions by foreign and domestic investors, while often speculative, have targeted areas with weak local land rights security in an effort to obtain low-cost land to produce agricultural and energy commodities (World Bank, 2010). Many countries in the sub-region have issued long-term leases to investors while ignoring local customary land rights. This phenomenon has been primarily driven by the increased demand for palm oil as well as biofuels. The growth of palm oil production has been a topic of particular concern for environmental organizations which worry that primary rainforest land will be cleared to make way for oil palm plantations (Tollens, 2010).



Photo 9.3: Industrial eucalyptus plantation – Pointe Noire, Congo

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Thus far, however, most Congo Basin oil palm investments have been in established, old plantations or at small-scales for local consumption. However, increased demand, and concurrent production in the Congo Basin, is expected. For example, Cameroon has increased its output over the last decade and has plans to nearly triple production by 2020 (Megevand, 2013). Included in this increase is an oil palm concession issued to Heracles Farm (an American company) that overlaps with an existing biodiversity protected area and community lands (Oyono, 2013b). A Singapore-based multinational has acquired

a large surface area for agri-business in Gabon (see country case below). Similarly, a one-million hectare oil palm plantation, to be established for biofuel production, was recently under review by the DRC government (Carrere, 2010). Recently, South African multinationals have acquired thousands of hectares of land for maize production in southern Congo. The next decade will undoubtedly see more investment. This land rush could cause long-lasting negative impacts on local communities and their customary land tenure rights (Wily, 2012).

3.3 Emergence of new cross-sectorial strategies

International efforts to support Congo Basin countries to reduce deforestation and eliminate illegal logging have made significant progress over the past decade. Mechanisms aimed at compensating efforts intended for the reduction of emissions from deforestation and degradation (REDD+) are being implemented in the sub-region. Two of the Congo Basin countries (the DRC and the Republic of Congo) are REDD+ pilot countries, with three others (Cameroon, the Central African Republic, and Gabon) involved in REDD+ planning or activities in less formal ways. REDD+ brings together government officials, international experts, civil society, and local communities around the issues of deforestation and forest degradation, and more generally moves the country towards the development of a natural resource inventory and land use planning process, both required for successful participation in REDD+. The time and energy spent on REDD+ and related carbon mitigation programs underlines the increasing concern over climate change and the international recognition that

tropical rainforests have an important role to play in climate change mitigation. However, due to limited progress in international negotiations and the challenges resulting from weak forest governance, a significant part of country level efforts are being delayed.

The long fight to reduce illegal logging in the Congo Basin took important steps during the past decade. Efforts led by the Forest Law Enforcement, Governance and Trade (FLEGT) program resulted in several countries agreeing to enter into negotiations to eliminate the export of illegally-logged timber into the European market. Cameroon, the Central African Republic, and the Republic of Congo have concluded a Voluntary Partner Agreement (VPA) with the EU, committing these countries to significant changes in forest management practices; whereas the Democratic Republic of Congo and Gabon are in the negotiation phase of the process (Megevand *et al.*, 2013).

4. Current trends

Nearly 40 % of usable land in Central Africa is neither cultivated nor protected, and is sparsely populated (Deininger *et al.*, 2011). If forest areas are excluded, 20 % of Central African land is usable and available for agricultural expansion. The race for agricultural land and natural resources, including metals and fossil fuels, is drawing a flow of investment into the region. Multi-national and private companies are negotiating large concessions with governments (Ochieng Odhiambo, 2011 ; Hoyle and Levang, 2012 ; Karsenty and Ongolo, 2012 ; Feintrenie, 2013). Agro-business projects and speculative land investments are multiplying, leading to ever higher land prices, latent conflicts and social damage (Anseeuw *et al.*, 2012). Large forest areas are threatened, as is access to land for rural populations (Cotula *et al.*, 2009 ; de Wasseige *et al.*, 2012). Furthermore, large agricultural and mining investments require associated infrastructure such as roads and railroads (Oyono, 2013c).

From a historical perspective, large scale land acquisition is not, however, a new phenomenon. There have been several waves : the development of large colonial plantations, the recovery and renewal of these plantations by newly independent states, and the privatization of large state plantations during periods of liberalization in countries of the region. The current wave thus is the fourth large-scale land acquisition wave (see Oyono, 2013 for the case of Cameroon). Nonetheless, forests have been preserved overall because of a lack of communication infrastructure, political risks, and a poor business climate which deterred investors (Megevand *et al.*, 2013). This, however, is changing with the political stabilization and economic emergence of countries in the region : agro-business and mining investors are showing renewed interest. Examples of the developments underway in some countries of the sub-region are presented below.

4.1 Gabon

Gabon covers a surface area of 267 668 km². Recent land acquisitions in Gabon were made to meet agro-industrial needs. In the absence of an existing land allocation and use plan, these long-term concessions were attributed by the President of the Republic, at times superseding existing forest permits or after a “declassification” procedure. A \$ 1 535 million contract was signed in November 2010 between the Government of Gabon and the multinational Singaporean company OLAM. With a total of nearly three million

hectares, this company has become the largest land holder after the Gabonese government. This “giant contract” includes several projects : special economic zones, oil palm and rubber plantations, and a fertilizer factory. These activities have led to changes in land statutes and new legal supervision in certain forest areas. Other legal and land use changes have taken place in Gabon in the fields of biodiversity conservation and forest management. Table 9.1 lists the lands converted to new forms of use over the last three years.

Table 9.1: Lands affected by change from 2010 to 2012 in Gabon

Site	Area (ha)	Manager/“ Owner ”»
Former permits not integrated into forest development	2 000 000	OLAM
Palm and rubber groves of Estuaire, Ngounié and Woleu-Ntem	300 000	OLAM
Greater Mayumba	656 000	SFM/Gabon and OLAM
Unclassed conservation series	240 008	Forest companies
Nkok Special Economic Zone	1 390	OLAM
Monseigneur Raponda Walker Arboretum in Mondah	6 747	National Parks Agency



Photo 9.4: Prospecting and marking a dense forest for logging, Gabon

The issue of land allocation and use involves several public institutions, namely seven ministries and two national agencies operating directly under the President of the Republic. The Ministry of Water and Forests and the Ministry of Territory Planning can implement initiatives involving the planning, allocation, and use of land, and territorial management. Only these two ministries can introduce land classification and allocation decrees. These two national agencies have comparatively more technical responsibilities. However, there is no official inter-sectoral coordination with regard to land use, leading to procedural problems.

Overall, the planning and implementation of land use and allocation schemes falls today at the confluence of several actions, notably the grabbing of land for agro-business (see table 9.1), the establishment of forest and mining concessions, and the construction of communication infrastructure. Under such conditions, conflicts are emerging and multiplying between property investors, and between property investors and rural populations, who often are supported by environmental advocacy organizations. The existing and foreseeable conflicts result from the superposition of land allocation and uses, for example, protected areas and mining concessions and a lack of inter-sectoral coordination at the state level. To this may be added factors inherent in institutional arrangements, particularly a lack of prior consultation and information sharing with the populations concerned.

To better supervise the developments underway, the state has taken a series of decisions. In 2012, the government of Gabon published the “Plan Stratégique Gabon Emergent” (Emerging Gabon’s Strategic Plan) (PSGE), to better develop and harmonize activities across all sectors. Many actions identified within the PSGE address land use planning for different sectors and at different scales. To coordinate among sectors at the broadest scale, the PSGE initiated a flagship program in “Strategic Planning and Land Use”. Three actions are listed within this program: elaboration and monitoring of the implementation of PSGE; the development of regional land use development plans; and, the development of a national land use plan. As set forth in the PSGE, the goal of the “Strategic Planning and Land Use” program is to define priorities and objectives for different uses of the land at a national level and to produce a national land use plan that identifies broad-scale, major zones by sector.

Once these zones are defined, each sectoral managing institution (ministry/agency) will be responsible for defining its land use within the zone, in line with sectoral plans of the PSGE. In other words, the national land use process is intended to guide and coordinate macro-level land zoning among sectors; within each zone, sectoral or local-level land use planning is to be managed at an appropriate operational scale. This national land use planning process was first initiated in October 2011 under the authority of the *Secrétariat Général du Gouvernement* (SGG). At that time, the SGG convened all implicated government institutions to the table in an official process to regroup various land-use-related initiatives into one coordinated land use planning process.

4.2 Equatorial Guinea

Despite its small surface area, 28 051 km², Equatorial Guinea comprises an essential component of the Congo Basin forest. The dense Equato-Guinean forest represents 80 % of the country's entire surface area (de Wasseige *et al.*, 2010). For many decades, forest resources were the lungs of the national economy, contributing up to 20 % of GDP in 1997 (CBFP, 2006). With the discovery of oil on Bioko Island in 1996, this contribution began an inexorable decline, and accounted for only 0.2 % of GDP in 2011 (CIA, 2012). On one hand, the oil boom is an indirect opportunity for natural resource conservation through the potential mobilization of additional financial resources. On the other, this phenomenon remains an important threat to biodiversity due to the accompanying human pressure and ensuing development of infrastructure in a context marked by the absence of a national land use planning scheme.

The management of natural resources mainly falls to two ministries, the Ministry of Agriculture and Forestry (MAB) and the Ministry of Fisheries and the Environment (MPMA). While MAB is the competent forestry body, the situation is less clear with regard to protected areas, which according to current laws fall under both ministries. In effect, Law n° 1/1997 of February 18, 1998 on Forest Use and Management stipulates in article 8 that MAB is the body in charge of land classification and allocation. The law provides for a National Land Classification and Allocation Commission to carry out these tasks. However, Law n° 7/2003 of November 27, 2003 on Environmental Management stipulates that MPMA is the competent ministry with regard to the classification and management of protected areas.

To date, the Commission in charge of allocating lands stipulated in Law n° 1/1997 has not yet been formed. Furthermore, the classification and allocation of lands is conducted in a piecemeal fashion by MAB and MPMA. Within MAB, there is the National Institute for Forest Development and Protected Area Management (INDEFOR-AP), also competent with regard to protected areas. On the ground, this translates into numerous overlaps between different land use categories (see figure 9.1). In practice, when a forest concession is classified on an area where one or several forest plots already exist, the

operator can log the area by signing a contract with the holders of the plots. When a protected area is superimposed over an area where one or several forest plots already exist, industrial logging can no longer be conducted on the area in question. Beyond this overlap management strategy, the World Resources Institute has noted that nearly 33 % of the total communal forest area (19 462 ha) and 9 % of the total nature reserve area (12 519 ha) overlap with other land use types (WRI, 2013).

Given the above, there is an urgent need to improve the governance of forest lands in Equatorial Guinea. In the short term, this involves the effective operationalization of the National Commission in charge of land classification and land use planning as set down in the Forest Law, and, over the medium term, reform of the legal system to resolve institutional conflicts and consolidate efforts through the creation of a joint land use planning platform. It also is urgent to develop and implement a national land allocation plan and a forest zoning plan. Whether the development objectives outlined by the government – such as the “Horizon 2020” development plan aiming to make Equatorial Guinea an emerging country – are achieved will depend greatly on these innovations.

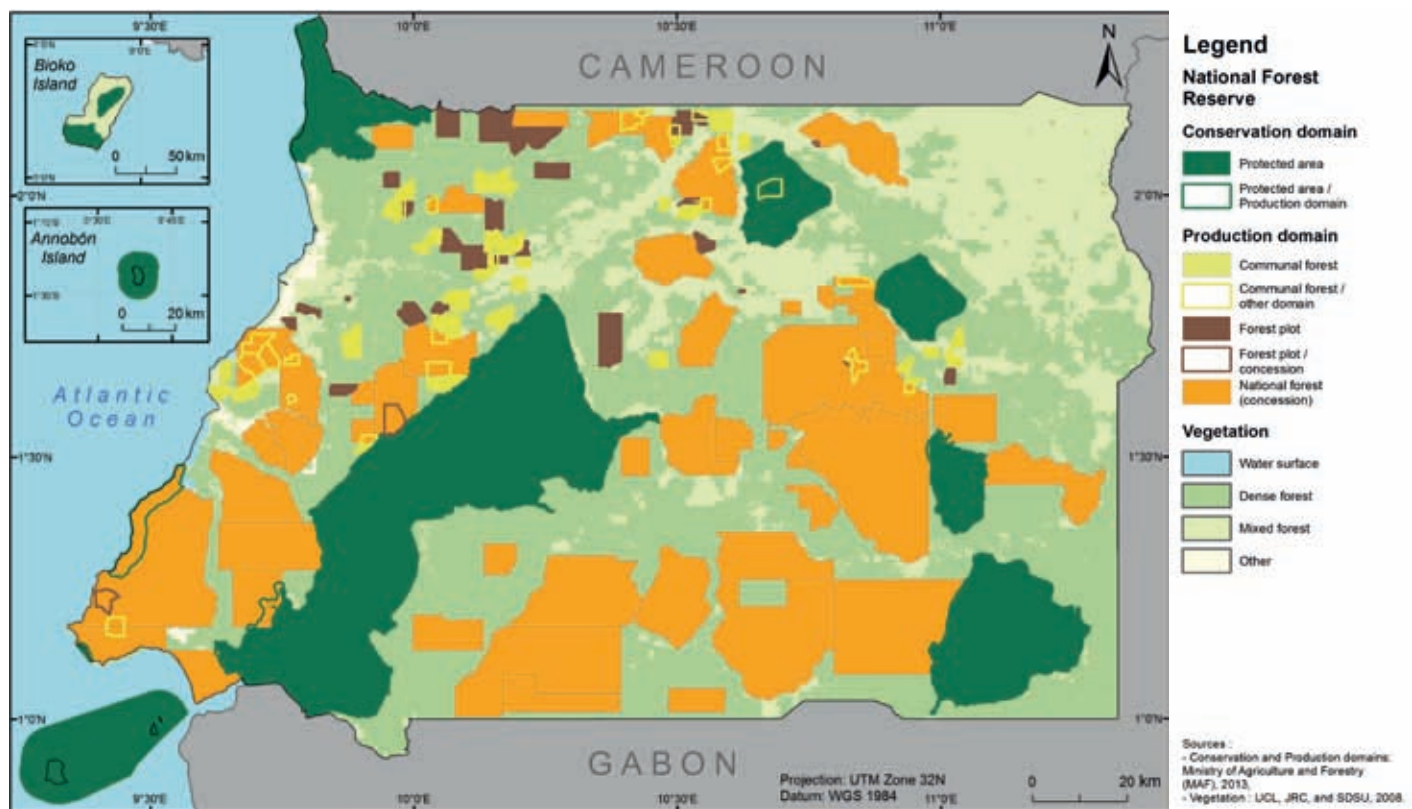


Figure 9.1: Overlapping types of land uses in the forest domain.

Source: WRI, 2013

4.3 Democratic Republic of Congo (DRC)

The DRC is a country the size of a sub-continent. Covering approximately 2.3 million square kilometers, the country enjoys a climate and hydrographical and geological context which are extremely favorable for its socio-economic development. Over 60% of its territory is covered in forest. Its fresh water bodies represent nearly 3.5% of the territory and contain nearly 50% of the fresh water of the African continent. Its ecosystems, both land and water, harbor fauna as diverse as they are unusual, with certain specimens rare and indeed even unique in the world. Important underground mineral and oil resources are abundant. The country today is at an historic turning point and is facing a land rush. The DRC is currently the world's second largest provider of land to multinational agribusiness corporations.

A characteristic of land management in the DRC is a low level of policy development and implementation. Sectoral laws, mainly the land, mining, forestry, and agricultural codes, often are incoherent and uncoordinated. Certain ministries have appropriated the prerogative to allocate areas

without taking into account national development needs. This situation, aggravated by the absence of communication between different sectors, has given rise to serious contradictions and misunderstandings regarding land allocation and use. Furthermore, "competing" practices, often implemented illegally, generate numerous conflicts between different land and resources users (mining, agriculture, and forestry activities, infrastructure development, small scale farming, biodiversity conservation, energy, etc.) at different activity levels (industrial and intensive, artisanal and subsistence, etc.).

There is no framework to coordinate all of the agencies working to develop the territory, whether at the national, provincial, or local level. Yet such a framework is needed to define the main strategic orientations regarding land cover and use and the spatial orientation of public, private, and community investments. Legislation regulating one sector does not assess the possible consequences for policies regarding other sectors. The allocation and use of lands consequently can

be anarchic, resulting in the unsustainable exploitation of natural resources. The various economic sectors are developing in a context of increasing pressure due to demographic growth and their own need to expand.

These discrepancies and the superimposition, indeed entanglement, of competing land and resource use schemes are at the root of latent and/or open conflicts: mining concessions encroach on protected areas, as is the striking case of the exploration of hydrocarbons in Virunga National Park; commercial forests compete with local community lands and protected areas; industrial agricultural concessions encroach on forest land needed for traditional agriculture; forestry and agro-forestry projects linked to the carbon market conflict with traditional uses of neighboring populations, etc.

To respond to the needs of different land use sectors, the DRC will progressively launch a national zoning process with a pilot phase that will be implemented in three provinces (Province Orientale, Equateur and Bandundu). The intersectoral steering committee operates under the coordination of the ministry in charge of forests. This zoning will commence with a prospective intersectoral study, carried out by the government, which will focus on the allocation of the overall space based on national development priorities. The DRC already has a land use plan at the community level covering about eight million



Photo 9.5: Slash and burn farming, rice fields – Oriental Province, DRC

hectares. This planning was begun by CARPE and its partners, including several national NGOs in existing conservation landscapes (see Chapter 11 of SOF 2010). This micro-zoning is based on participatory mapping and permitted the property rights of local communities to be determined. These are now in a position to negotiate and they can participate, on an equal footing, in the national land-use planning process.

Box 9.3: Use of national space – Sectoral ambitions

The sectoral ambitions for the use of national lands vary according to the sectors and potential resources concerned. Thus, for its development, the hydrocarbon sector alone plans to use up to 80 % of the national territory. The mining sector claims 42 %. The agricultural sector is counting on 80 million hectares of arable and irrigable land, i.e. about 34 % of the country. The conservation sector, which currently occupies about 12 % of the territory, plans to develop and cover 17 %, in accordance with the objectives declared at Nagoya. As to the logging sector, the areas to be assigned to it have not yet been defined through lack of a clearly-defined forestry policy. At present, the forest concessions cover about 12 million hectares. The lifting of the moratorium on the granting of new concessions, the granting of forest concessions to local communities and the formalization of small-scale logging will significantly increase the area of production forests. In order to achieve sustainable management of natural resources, it will be necessary, through negotiation, to re-dimension the ambitions of the various sectors and to explore the possibilities of multiple, non-conflictive and non-prejudicial uses of land within a fixed national space.

4.4 São Tomé & Príncipe

São Tomé & Príncipe covers 1 001 km². Its last forest inventory dates to 1999 (Salgueiro and Carvalho, 2001), but it was incomplete; the latest complete survey was conducted in 1989 (INTERFOREST AB, 1990). Despite the lack of information on forests, there are indications of increased deforestation and forest degradation (de Lima, 2012; Jones *et al.*, 1991). These correspond to strong socio-economic changes experienced in recent years, namely a steep population growth from 137 599 inhabitants in 2001 to 187 456 in 2012 (+36 %) (Instituto Nacional de Estatística, 2013). In 2006, São Tomé & Príncipe created the Obô Natural Parks, covering 26 136 ha in São Tomé and 4 412 ha in Príncipe (Direcção General do Ambiente, 2006). Despite encompassing a large proportion of the country, these parks are not effective in protecting the forest because they receive very little funding and managers have almost no ability to enforce environmental legislation.

Forest loss and degradation are driven by large-scale projects, but also by diffuse small-scale activities. Because of insufficient forest monitoring, it is hard to say how much each of these activities are impacting forest ecosystems in São Tomé & Príncipe, but it is likely that both have significant negative impacts. Agro-industrial plantations cover a total of 44 758 ha and this area is likely to increase in coming years. To understand the current challenges involved in planning the allocation and use of land in São Tomé & Príncipe, one must study the past.

Beginning in 1975, most of the colonial plantations were transformed into state-run agricultural enterprises (industrial cocoa, coffee, coconut and oil palm plantations). This process was poorly regulated. The promulgation of the 1991 Land Act (Law n° 3/91) marked the beginning of agrarian reforms that defined a new status for land and new land allocation procedures. The ceding of state run lands began in May 1993. The Land Act distinguishes four specific land regimes: public State domain; private State domain; national parks and reserves; private and community property. For example, the National Land Reform Institute issued 101 community land titles of 140 000 ha. The Forest Law, published in November 2002, is based on this spatial specialization.

Among the large-scale projects that might directly affect forests, oil palm concessions stand out as having some of the greatest impacts. This venture, led by Agripalma, a Santomean company involving national investors and an oil palm giant, has now been downscaled to 3 000 ha in the South of São Tomé Island, after a temporary review of the contract arrangements. Other significant agroforestry investments include: a concession to the Libyan company, “Monte Café”, to invest in high-quality coffee; the development of SATOCAO, a national society created to invest in cocoa plantations; and, PAPAFA, a government program that is investing in cooperatives to export high-value agricultural goods. A large portion of Príncipe has been ceded to HDB, a South-African company, to implement a development plan, which aims to create the first eco-sustainable island in the world.

New infrastructure also has the potential to indirectly affect forests. Among the most important is the rehabilitation of roads, which will facilitate access to the forest, namely in the South of São Tomé. Additionally, the construction of a deep-water port is planned in order to facilitate timber exports. In the short run, this infrastructure development will increase timber harvesting. Small-scale, diffuse activities that are threatening São Tomé & Príncipe forests include small-scale farming (namely commercial horticulture in the highlands of São Tomé), logging, unregulated hunting, and palm wine collection. Logging is largely deregulated and takes place mainly in public lands, where most high-quality timber remains (de Lima, 2012). Given São Tomé & Príncipe’s insularity, its forests are likely to be particularly vulnerable to invasive exotic species (Dutton, 1994). Since the largest forest blocks are within two relatively large Obô Natural Parks, most pressure and areas of potential land-use conflict are on their borders.

The absence of policy integration among land allocation and use initiatives (agri-business, infrastructure development, biodiversity conservation and community activities) results in damage to the forests. There is a very little planned, proactive collaboration among the various public agencies responsible for land allocation and use issues. Even though São Tomé & Príncipe has a very small land surface area compared to other countries of the Congo Basin, there are many land

conflicts resulting from both overlapping concession types and from land competition between small producers and big land users and investors. For example, large investments have been kept outside the Obô Natural Parks borders, but displace small-scale activities and create the potential for land-use conflicts. Moreover, the development of oil palm plantations has a high potential to create conflicts, as oil palm plantations will have to either be established in national parks or in areas already ceded to small-scale farmers (de Lima, 2012).

With the support of foreign partners, the state has developed a set of tools: agro-ecological zoning; national forestry development plan; agriculture and sustainable development policy map; agricultural potential map; national biodiversity conservation strategy and national poverty reduction strategy. These tools must be implemented effectively alongside sustainable land use planning

to keep the agro-industrial threat under control. To that end, there is a need for sound land policy, land allocation practices and use schemes in São Tomé & Príncipe. Recommendations from the proposal of the national plan for forest development (Salgueiro and Carvalho, 2001) should be implemented and integrated with strategic plans from related sectors, such as conservation, agriculture and public infrastructures. These recommendations should also be updated, supported by newly collected data on the distribution and state of São Tomé & Príncipe forest resources, and take into account new opportunities, such as the emerging market of carbon credits.

4.5 Burundi

With a population of over 8 million and an average density of 310 inhabitants/km², Burundi (27 830 km²) is one of the African countries where issues and challenges of land and resources allocation, tenure, and use are extremely critical, particularly as 90% of the population live in rural areas. The subdivision of land resulting from inheritance practices has greatly reduced the average size of farms, estimated to be 0.3 ha per six-person household. This situation is leading to grave problems related to the appropriation and allocation of rural land, problems which are reinforced by land speculation.

Agriculture remains the country's dominant land use. According to the 2010 National Agricultural Strategy, the agricultural area used was 792 510 ha in 1982 (out of the 1 674 810 ha of arable land), leaving 627 580 ha undeveloped. At that time, the cultivated agricultural area coefficient in relation to the total agricultural area was 47.3%, representing considerable future development opportunities. Subsistence agriculture today, however, covers 90% of cultivated land (about 1 210 000 ha), or approximately 30% of

the country's land area. Nonetheless, there has been an expansion of industrial crops in the country – with 9 700 ha of selected variety palm groves, 3 000 hectares of natural “Dura” variety palm groves, 10 000 ha of tea and about 100 000 ha of arabica coffee.

Land allocation and use are complex issues in Burundi because of multiple factors. The main threats to the sustainable use of land and resources are related to the dynamics between actors presented below:

- Population migration and mobility, accentuated during conflicts in the country: for nearly half a century, strong migration has taken place from less fertile to more fertile areas. This concentration of the population on fertile areas has resulted in the over exploitation of these lands and their resources.
- The intensification of land use through the creation of industrial forest plantations. Since the 1980s, Burundi has invested heavily in industrial tree plantations. Alongside communal woods, there are private/individual tree plantations and plantations belonging to religious groups.



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Photo 9.6: Partition of agriculture, forest and protected areas – National Volcanoes Park, Rwanda

- Agricultural and agro-industrial concessions constitute the third type of threat. The country has numerous medium-size tea concessions, most often inherited from colonial companies. Incorporated onto public land, these concessions have become the property of local elites. The country is experiencing an internal land grab and monopolization of land by elites. Public land is being converted into private land on massive scale.

The planning of land allocation and use falls under several public institutions. The responsibility for the cadastre and for titling has shifted several times between different ministries. “Titres fonciers” and “cadastre” will become one entity. The cadastre is now located in the Ministry of Water, Environment, Territory Planning and Urbanism. The Ministry of Agriculture and Livestock is involved in land-use planning. The responsibilities for decentralization and local

governance are in the hands of the Ministry of the Interior and the Ministry of Decentralisation and Communal Development. The Forestry Department is in charge of forest plantations while the National Environment and Nature Conservation Institute (INECN) is responsible for protected areas. The National Commission for Land and Other Properties was set up in 2006 and has the authority to mediate and resolve land disputes related to refugees and internally displaced persons, to obtain compensation, and to update the inventory of state-owned lands (KIT, 2012). For land governance, including forest land, Burundi developed its Land Policy Letter in 2008. A Coordination Unit was set up in 2009 to support the implementation of the new land policy (KIT, 2012). Its task is to facilitate inter-ministerial cooperation, donor coordination and collaboration with civil society. This coordination is, however, difficult to establish. Since then, a new land Code was promulgated in 2011.

Box 9.4: Little foreign agricultural investment, but internal land grabbing

In Burundi, foreigners are granted equal protections to person and property by the Constitution of 2005, without restrictions on foreign ownership of land. However, there is little land available, the land administration is heavily bureaucratic and the political environment is unstable. The country has not yet attracted many foreign investors in the agricultural sector, but there is a lengthy history of land grabbing. It took place primarily during the long period of internal armed conflicts (1993-2001), partly on public land and along the lakes. Numerous parcels were reallocated to local elites. These reallocations, which have since been legalized, are sources of tensions.

Source: KIT (2012).

Land use is at the heart of a variety of conflicts. The tragic events of 1972 led to a massive outpouring of refugees (about 300 000 people) into neighboring Tanzania. These people left the country before the creation of protected areas and the installation of large national reforestation blocks in the 1980s. The creation of 1 100 ha of nature reserves in Rumonge Commune, 5 000 ha of plantations in Vyanda Commune and the Ruvubu Nature Reserve (50 800 ha) greatly reduced agro-pastoral areas in the south and northeast of the country, accentuating conflicts over access to land. The 1993 war also resulted in a second wave of refugees into Tanzania. Their return is generating conflicts over the appropriation of land.

Internal refugees, referred to as “displaced persons”, have found, for want of better alternatives, unauthorized settlement sites on state and communal woodlands and protected areas. Buffer areas around reserves have completely disappeared. Furthermore, the scarcity and fragmentation of land is inducing landless people to

establish themselves in an anarchic and illegal manner on state and private lands, including forest land, which appear vacant. Government services are unable to put a stop to these spontaneous settlements which create a source of conflict over land use. In 2007, a mining exploration permit covering 95 % of Ruvubu National Park was awarded to the company Danyland. This example of superimposed land use schemes illustrates the weak intersectoral coordination in the country.

Burundi has a national sustainable land use strategy placed under the technical responsibility of the Ministry of Territorial Planning. It includes the development of a national development plan, provincial development plans, and a national village-based program (development planning at the village level). Concretely, this strategy emphasizes the development of forest plantations. Nonetheless, if this strategy is not implemented in a participatory manner (notably with rural communities), there is a real risk that it will only heighten conflicts between the different users.

4.6 Republic of Congo

The Republic of Congo (342 000 km²) contains 21 278 180 ha of forest land. This is the third largest forest area on the African continent after those of the DRC and Gabon (de Wasseige *et al.*, 2012). Seventy percent of these forests are considered to have commercial potential and hold high biological diversity: over 300 species of timber have been identified. Savanna covers 35 % of the country, stretching over the plain of Niari, the Bateke plateaux, and the Congolese Cuvette. Figure 9.2 highlights the country's forestry potential relative to the area of forest concessions attributed (in orange).

Congo's economy is based mainly on the exploitation of hydrocarbons, which represent 88 % of the country's exports. Timber forest products (wood, charcoal and wood products), the second export commodity, accounted for only 3 % of exports in 2010 (Le Roy, 2011). Because of food deficits, 20 % of imports are made up of meat, fish and agro-industrial products.

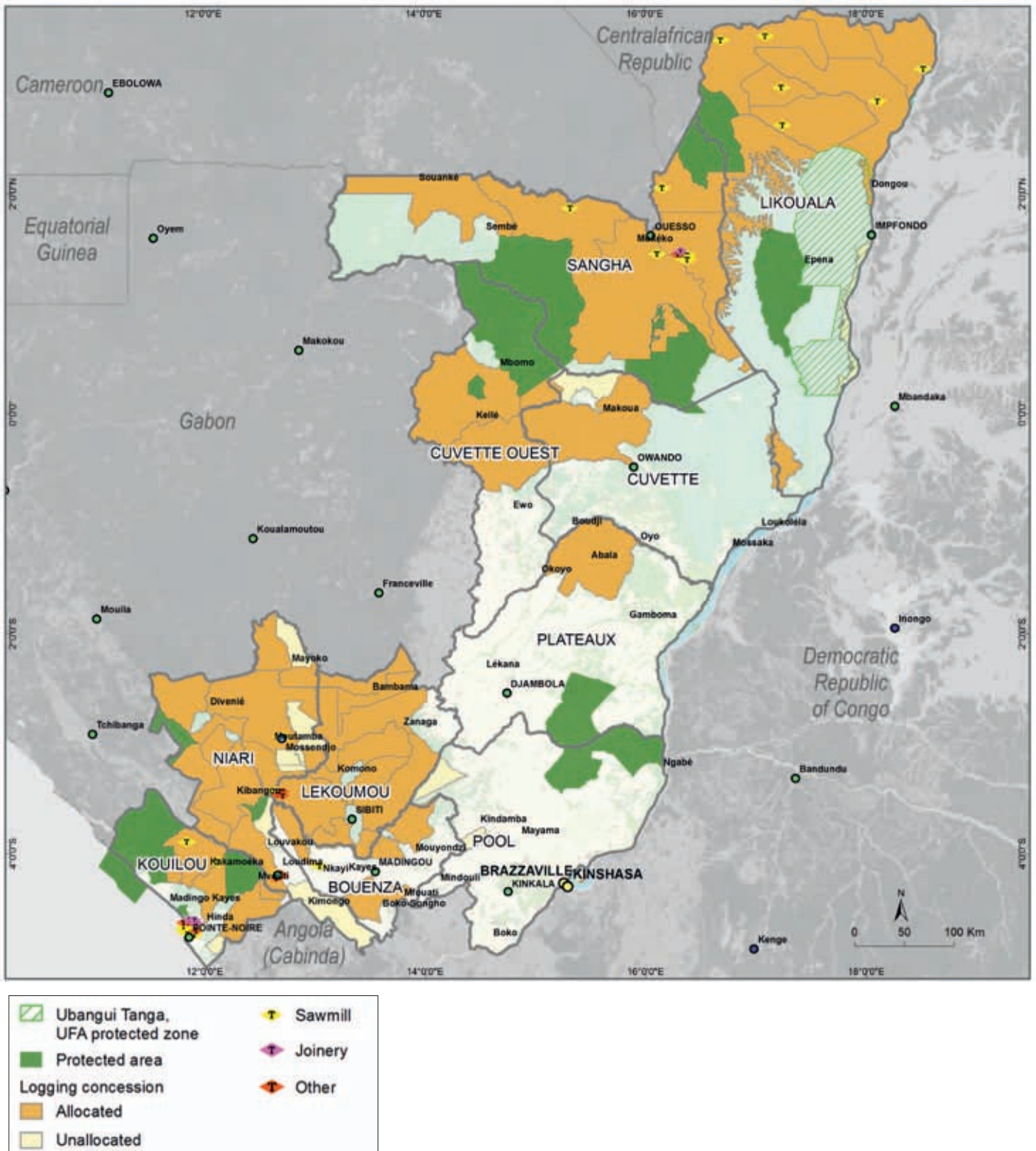


Figure 9.2: Republic of Congo forest atlas. In orange, forest concessions, on which mining concessions are being superimposed. <http://www.wri.org/tools/atlas/map.php?maptheme=congoforest>.

Source: WRI

Forest management in the Republic of Congo is governed by Law n° 16-2000, of 20 November 2000, concerning the Congolese forest code. The forest code divides the national forest domain into two parts: the state forest domain and the privately owned forest domain. The state forest domain includes both the permanent and the non-permanent forest domain, and includes the forests of the private state domain, forests belonging to public entities, communal forests, and forests held by other local or territorial government bodies. The forests in the private state domain are those which are classified according to decrees by the Council of Ministers. The Congolese forest domain is divided into 34 Forest Management Units (UFA) varying in size from 200 000 to one million ha (PAGEE, 2012). The UFAs include Forest Exploitation Units (UFE).

Outside the national forest domain, there are 73 000 ha of artificial plantations, mainly cloned, fast-growing species like eucalyptus (60 000 ha), as well as pine (4 500 ha), limba (7 500 ha) and diverse species (1 000 ha). Industrial eucalyptus plantations supply the Pointe Noire wood chip factory which has produced over 400 000 tons of wood chips for export annually since 2008. Numerous agro-industrial actors (Oyono, 2013), which are major land users, are also present in the country, including:

- the Société Agricole et de Raffinage Industriel du Sucre (SARIS), in Niari valley (Bouenza department). This is a subsidiary of the French Castel and Vilgrain group. SARIS cultivates 12 500 ha of sugar cane on a 20 000 ha concession ;
- the Malaysian company Atama, which in 2010 acquired the right to develop an agro-industrial palm oil production complex on 470 000 ha (including 180 000 ha of plantations) in the departments of Cuvette Centrale and Sangha. The concession was previously covered with degraded forest (according to official statutes) derived in part from a declassification of the Ngombe UFE (managed by IFO) ;
- the Congo-Agriculture company of South Africa, which since 2012 has been developing a 20-year maize project in Niari and Bouenza on a 80 000 ha concession. The concession is situated on the permanent state domain. This project is struggling to find an agreement with the customary land owners ;



Photo 9.7: Small-scale sawyers, Congo

- ENI Congo (an Italian oil group) is planning to create oil palm plantations on 70 000 ha of savanna. In the short run, two experimental plantations are planned in Ngabé in Pool (2 500 ha) and Kibangou in Niari (2 500 ha) ;
- the LignAfrica project, implemented by the Forest Resources Management (FRM) engineering consulting firm, will set up about 6 500 ha of eucalyptus plantations in the sub-prefectures of Ignié and Ngabé as part of a carbon offset project ;
- the Olam group has set itself up in Ouesso region, in the north of the country, to revive the cocoa sector.

Mining concessions also are increasing with a large number of new mining companies (Devey, 2013). It is difficult to access information on the areas conceded. Mining currently is organized as follows:

- iron mining: in the south of the country, Congo Mining (a subsidiary of the Australian company, Equatorial Resources) is to launch iron exploitation in Niari department in early 2014. Also in Niari, the concession managed by DMC Iron Congo, controlled by the South African group Exxaro, will begin production in 2014 with iron reserves estimated at 2.6 billion tons. In Lékournou department, a giant iron mining concession was awarded

to the South African Iron Ore and the Swiss Xstrata. In the north of the country, Sundance Resources and Core Mining (two Australian groups) have acquired two iron mining concessions (Devey, 2013);

- potash mining: very large potash deposits are located in the south of the Congo and two mining and processing projects, controlled by Australian and Chinese companies, are under development (Devey, 2013).

In 2005, the Ministry of Planning, Territorial Management, Economic Integration and NEPAD (MPATIEN) developed a National Territorial Management Plan (SNAT) for the Republic of Congo. It aims to reduce disparities between Pointe Noire and Brazzaville and the rest of the country. To this end, the planned objectives are to implement the following (MPATIEN, 2005):

- a “communications and energy framework”. This will permit the Congo to reaffirm its historic role as a transit country in Central Africa;
- a sustainable management of forest and environmental resources by positioning itself as a leading country in Africa in the forest sector and in the field of natural resource conservation; and
- a national mapping of areas suitable for agriculture, livestock farming, fishing and fish farming.

The priority of agricultural development is set down in the National Food Security Plan (PNSA). In 2011, the Congolese government launched a National Afforestation and Reforestation Development Program (ProNAR) which aims to “establish one million hectares of diverse and varied plantations over a ten year period” (MEFDD, 2012). Nearly half of the plantations planned are in the center of the Congo, notably in the departments of Pool (200 000 ha) and Plateaux (250 000 ha). ProNAR will enable the Congo to meet national and international demand for biomass energy, timber, non-timber forest products (NTFL) and carbon sequestration.

The Congo’s Ministry of Forest Economy and Sustainable Development (MEFDD) hosts the interactive Forest Atlas of the Congo, a forest information system operated by a joint World Resources Institute (WRI)–MEFDD team. “Organized around a GIS (geographic information system) platform, the Atlas facilitates access to objective, up-to-date information on the Congolese forest sector. One of its main objectives is to strengthen forest management and land use planning by bringing all major land use categories onto the same standardized platform. The joint MEFDD-WRI team updates the forest Atlas database as new information becomes available and periodically publishes reports, posters, and online and CD/DVD mapping applications.” (WRI, 2013)

The Republic of Congo has committed to an inter-ministerial coordination of the allocation of land and natural resource use. The creation of a Land Affairs Ministry to coordinate negotiations between ministries when concessions are being attributed is a strong indication that this is happening. The interactive forest Atlas also is an indication of a desire on the part of the State for transparency. It would be advisable to generalize this approach through the creation of a multi-sectoral national atlas with the other ministries. The conduct of a national agricultural production potential study should enable the Ministry of Agriculture to better target the development of production areas, and permit informed decisions during negotiations with agro-industrial groups (Oyono, 2013c).

4.7 Central African Republic (CAR)

The CAR covers 622 984 km². From a political perspective, it is a fragile state, with unstable central institutions. The development of political and legal instruments relating to the allocation and use of land is a very uncertain process in the CAR. Two principal legal instruments apply: land legislation and forest legislation. The last time significant modifications were made to land legislation was in 1964. A draft land bill was written in 2012 but has not been finalized due to recent events in the country. The CAR governs and administers its forests based on Law n° 08/022 of 17/10/2008 of the forest code: forest land is divided into two domains; the permanent forest domain and the non-permanent forest domain. The permanent forest domain is sub-divided into the state forest domain and the public for-

est domain. The most economically important resources are concentrated in the permanent forest domain (logging forests and diamond basins).

Logging status has not changed appreciably since 2010. Concentrated in the forests of the southwest, logging is mainly industrial, organized in the form of a stable number of concessions. The 14 attributed logging and management permits (PEA) are all under fixed logging and management agreements. Only three PEA (165, 186, 187) have changed status since 2010 (see table 9.2). Intensive illegal logging by armed groups has been reported, with damaging consequences to customary property rights and concession holders.

Table 9.2: List of logging permits (PEA) and forest companies in 2013

N° PEA	Forest Company	Status	Status of plans	Source of Capital	Administrative area (ha)
164	Thanry	Awarded	Approved (CDAE)	China	193 800
165	IFB	Awarded	Approved (CDAE)	France	119 000
167		Not Awarded			
169	IFB	Awarded	Approved (CDAE)	France	150 208
171	SEFCA	Awarded	Approved (CDAE)	CAR	296 306
174	SEFCA	Awarded	Approved (CDAE)	Lebanon	333 000
175	SOFOKAD	Awarded	Approved (CDAE)	China	96 281
183	SEFCA	Awarded	Approved (CDAE)	Lebanon	294 478
184	VICA	Awarded	Approved (CDAE)	China	221 907
185	SCAF	Awarded	Approved (CDAE)	Greece	294 478
186	IFB	Awarded	Approved (CDAE)	France	109 444
187	SCD	Awarded	Approved (CDAE)	Italy	88 547
188		Not Awarded			
189		Not Awarded			
Total					2 061 669

Source: CDF, WRI.

Mining projects were under development and being finalized, at least through 2012. The state promoted the development of the mining sector, the only sector capable of attracting major international investment. Although the CAR joined the Extractive Industries Transparency Initiative (EITI) in 2011, it remains very difficult to obtain hard data on this sector despite the efforts of

NGOs and civil society to reinforce transparency in the legal procedures for awarding permits.

The southwest of the country is dotted with artisanal diamond mines whose activities, which are poorly documented, add to deforestation. There is very little available information regarding agro-industrial projects. Local elites, with the



Photo 9.8: Palm nuts are used to make oil, among other things

support of foreign “mercenaries”, have acquired an option to create medium size plantations (oil palm, maize, soy).

As in many other domains, the question of the allocation and use of land is supervised by institutions that have been weakened by sustained political instability. The CAR regularly suffers from armed rebellions. The transitional government of national unity (set up under agreements with the Séléka rebel coalition in January 2013 prior to the latter’s victory) created a new Ministry of Water, Forestry, Hunting and Fishing, which has been retained by the current government.

Under the successive governments that have ruled the country, inter-sectoral coordination regarding the planning of land allocation and use has been practically non-existent, creating the impression of ceaselessly starting from zero. The successive central governments furthermore have been unable to establish state control over the entire country. Armed groups create their own rules regarding the use of land and resources. The result is the irreversible deregulation of the occupation and use of land on one hand and increased diamond mining on the other.

From a conventional perspective, conflicts over land use involve the overlapping of logging

and mining in the southwest of the country. The issuing of new mining exploration permits inevitably will result in logging concessions overlapping on protected areas. Alongside this type of conflict, there are vertical conflicts between the state and local communities and indigenous populations, whose property and forest rights are minimized in legislation. The CAR has a law regarding the promotion and protection of indigenous peoples which has no legal force. Lastly, the Balkanization of the country between armed groups, local and foreign rebels, and “warlords” has generated conflicts over the use of land and resources, not only between the armed groups and local communities, but also between these groups and the central government.

It is difficult to decipher the government’s response mechanisms regarding land allocation. This state is wracked by incessant convulsions that disrupt the strategic efforts of international and national experts. A mapping inventory is underway, coordinated by the Forest Data Center (CDF) cell, which should provide a more precise picture of the industrial plantations in the southwest forest area. The development of a national REDD+ strategy likewise will bring greater clarity to the integration of forest plantations and REDD+ projects in the overall question of land use in the CAR.

4.8 Cameroon

With a territory of 475 442 km², Cameroon today is facing an acceleration in forest changes from large infrastructure projects, the multiplication of extractive concessions (mining and oil), and the large scale conversion of land to agricultural uses. Although reliable statistics are not available, it is known that these activities cover a considerable amount of land and forest. In 2013, the accumulated demand for large scale conversion of land to agricultural uses was estimated between 1.6 and 2 million ha (3.3 to 4% of the country’s surface area), and will increase over the coming years.

Major infrastructure projects and extractive concessions are part of the large infrastructure and industrial investment defined in the Strategy Document for Growth and Jobs (DSCE), an ambi-

tious foundation for government development and economic growth actions through 2035. The main infrastructure projects are the Lom Pangar, Memve’ele and Mekin hydro-electric dams, the Kribi and Limbe deep water ports, the Yaoundé-Douala highway, the Mbalam-Kribi railroad, etc. The extractive concessions involve the exploration and exploitation of hydrocarbons (gas and oil) and minerals along the southern coastal area, and the exploration, exploitation and processing of cobalt, nickel and manganese deposits in Lomié, diamond in Mobilong, iron in Mbalam, bauxite in Ngaoundal and Mini-Martap, and rutile in Akonolinga.

The large-scale conversion of land for agricultural purposes lacks transparency. Conversion takes place through transfer, disposition, concession or

sale. Large-scale land transfers are not new. Global food and financial crises have pushed investors to externalize and to secure their food production on a global scale by acquiring, through long-term emphyteutic leases, vast areas of agricultural land. In the last few years, about twenty large-scale land acquisition operations have been completed for the production of palm oil, rubber, rice, and maize over the national territory. However, the most emblematic initiatives have been south of the 5th parallel in the southwest, south, coastal, and central regions (Hoyle and Levang, 2012; Oyono, 2013b). These include, for example:

- the exploitation of oil palm on 73 086 ha over 99 years in Ndiang and Koupe-Manengoumba in the southwest by SG Sustainable Oils Cameroon (SGSOC), a subsidiary of the American Héraklès Farms company;
- the 41 388 ha concession of the Singaporian company GMG Hevecam to cultivate rubber in Nyeté, Lobé and Kribi;
- the 78 529 ha concession in Dibombari, Mbongo and Edéa awarded to SOCAPALM to grow palm oil;
- numerous land acquisitions made by Asian multinationals in the department of Nkam (Hoyle and Levang, 2012). One also should note the 10 000 ha ceded to the Chinese Iko Agriculture Development Company in the department of Haute Sanaga for rice production.

The pivotal planning instrument for land allocation and use is the Cameroon forest zoning plan. This instrument exists alongside cadastral arrangements, notably for mines, and a zoning experiment initiated by CARPE around national park complexes on the borders with Gabon, Congo, and the CAR. Above the zoning plan, there is the 1994 Forest Law and the 1974 Public Land Law, both in advanced stages of revision. In 2011, Cameroon passed a law framing territorial management and sustainable development. As in other countries in the region, there is a clear lack of inter-sectoral coordination between the ministries most involved in land issues: the Ministry of Forests and Fauna, the Ministry of the Environment and Nature Conservation, Ministry of Mines, Ministry of Territorial Planning and Management, Ministry of Agriculture and the Ministry of Decentralization. The superimposition of different and conflicting uses on the same area is one result of this absence of coordination.

The land footprints of large infrastructure projects and extractive industries, and the large-scale land acquisitions for agricultural uses, reveal, gener-



Photo 9.9: Palm grove near the Cameroon coastline

ate, and crystallize conflicts resulting from overlapping logging and mining or agro-industrial permits, and between mining permits and protected areas (see figure 9.3). Other conflicts result from the legal duality between modern and customary land and forest rights, generating disputes between concessionaires and local communities (Oyono, 2013b).



Photo 9.10: A camp used by loggers to inventory tree species in a concession

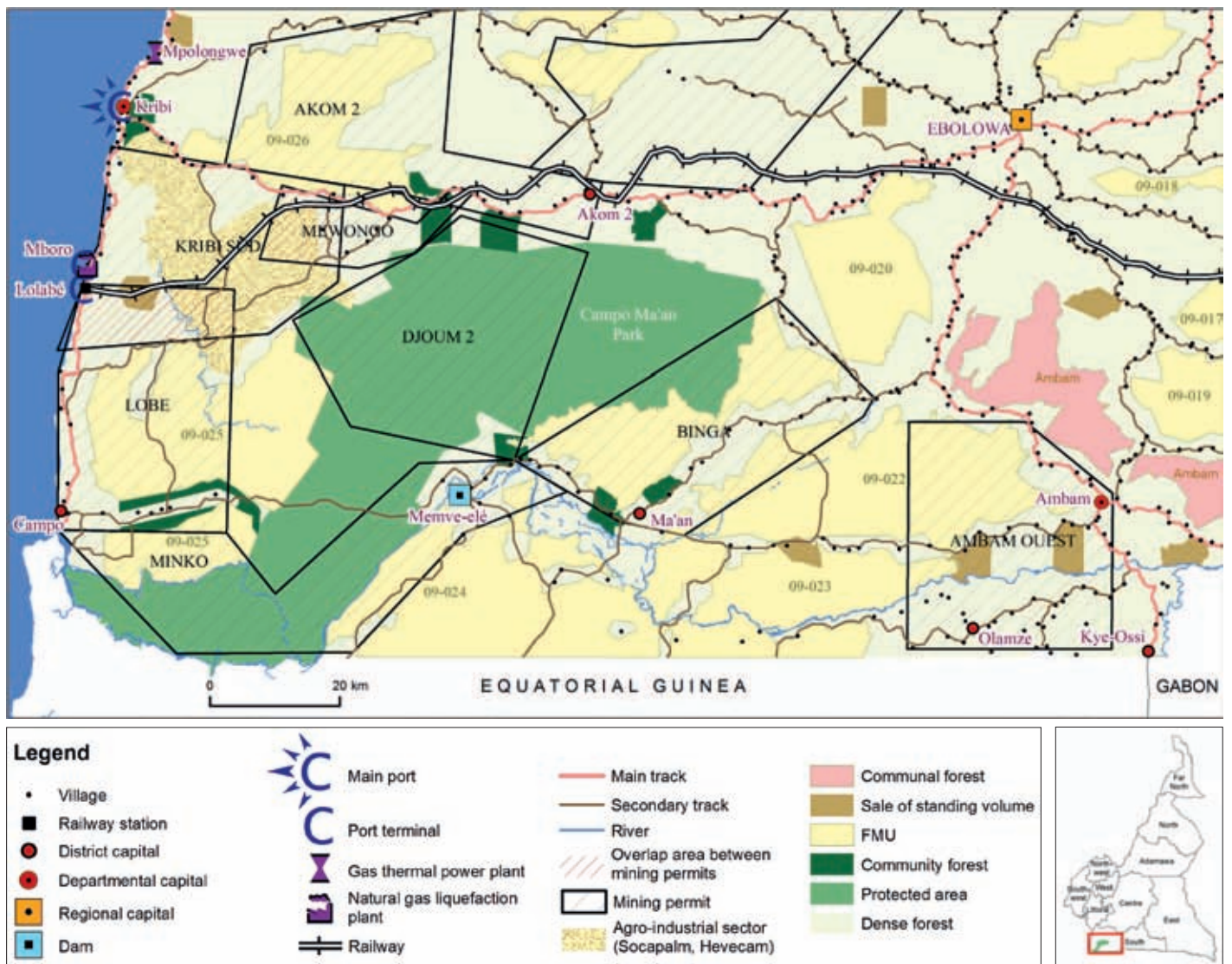


Figure 9.3: Overlapping of land use schemes around the Campo-Ma'an National Park (in green)

The Cameroon government is developing response mechanisms to these problems: the revision of forest and land legislation, the implementation of the Framework Law for territorial management and the revision of forest zoning. The problems related to land allocation and use could be resolved. For this, critical reforms must be undertaken, and modern integrated natural resource management tools must be developed

and implemented. It would be advisable to coordinate the different laws, recognize customary land practices – rather than excluding and/or leaving them to the mercy of foreign investors and elite officials – develop a single national land register, institutionalize impact studies and generalize the practice of “prior informed consent”.

5. Analysis of New Actors

The new economic actors in Central Africa are mainly the new forest concessions and agro-industries, mining companies, “carbon planters”, and conservation actors. Forest land transactions have opened the door to these new actors. The national economies and citizens hope for a share in the wealth which they will create, even if the practices of these new operators often are fairly opaque and indifferent to environmental and social consequences, raising legitimate concerns (Karsenty, 2010; Putzel *et al.*, 2011; Karsenty and Ongolo, 2012). The quickening forest “land grab” is only part of the overall large-scale land investment phenomenon.

While this movement goes back to the beginning of the European colonial period in Africa (Cotula *et al.*, 2009; Karsenty, 2010; Deininger, 2011; Anseuw *et al.*, 2012), current large-scale land investments are giving center stage to actors whose motivations and rationales should be better understood. A first review of forest actors operating in the Congo Basin was made by the CBFPP (2006), and highlighted the diversity of actors involved.

Since then, forest lands of the Congo Basin have faced economic, socio-political, and environmental changes. These have led to the reshaping of the forestry sector actor landscape that was described in 2006. A new typology highlights several categories of actors (Jorand and Manganella, 2012):

- States (European, Asian, and North American), instigators of investment in African countries;
- local investors, acting in a personal capacity and including political, administrative, and economic elites;
- international financial institutions and pension funds;
- private banks;
- socio-professional organizations;
- multinational companies.

However, this list is not quite complete, as it seems to omit an important category of actors who operate in the emerging niche of forest carbon transactions. From a geopolitical perspective, Deininger (2011) and Anseuw *et al.* (2012) distinguish three groups of investors in the large-scale land acquisitions: (i) emerging countries such as China, Brazil, India, and South Africa;



- (ii) Persian Gulf oil states such as Saudi Arabia, United Arab Emirates, Qatar, and Kuwait; and
- (iii) northern developed countries.

Photo 9.11: Discussion between DGE and representatives of a company, Gabon

The motivations of private actors, notably the multinationals, private banks and pension funds, are fairly conventional, as they seek to maximize their profits and provide better returns for their shareholders (Cotula *et al.*, 2009; Saturnino *et al.*, 2012). States are investing in land in a quest for food security for their people – by producing food and agricultural raw materials outside their borders – and in mining to meet their raw materials and energy needs (Cotula *et al.*, 2009; Deininger, 2011; Anseuw *et al.*, 2012). In both cases, land investors are driven by a desire to guarantee growth in their home countries, and are not necessarily taking into account the interests of the host country (Jorand and Manganella, 2012).

Protecting forest ecosystems and combating climate change seem to be the main motivations of investors operating in the “carbon” niche and of those working for the conservation of rich biodiversity and threatened forest ecosystems (Karsenty and Ongolo, 2012). This niche is attracting heterogeneous actors: States (Norway); the World Bank (Forest Carbon Partnership Facility); international NGOs (WWF, WCS, CI); national NGOs (Environment and Development Center in Cameroon and the Council for the Defense of Legality and Traceability in the DRC); and

private project holders. All of these actors are seeking new funding derived from the globalization of environmental concerns.

If the trends in forest land transactions are analyzed, it must be concluded that the ensemble of investors follow a “rent capture” logic. This revenue seems to be at the heart of an emerging system favoring new users of Central African forest lands. The heterogeneity of actors is becoming more pronounced and the changes underway are eroding the preeminent role of states in this new landscape configuration. This is a major change in relation to the conclusions published by the CBFP in 2006.

The increasing diversity of players, coupled with decline in the role of states (Karsenty and Ongolo, 2011), risk prejudicing collective sustainable management efforts and the conservation of Central African forest ecosystems. The forests of Central Africa are not infinite and cannot allow the unplanned attribution and grabbing of large areas to continue indefinitely. The “forest land market” and the dynamics of policies focused heavily on economics will unavoidably foster competition and conflict between various land use sectors. This development will further weaken customary land use practices (Mertens and Belanger, 2010; Hoyle and Levang, 2012; Schwartz *et al.*, 2012).

6. Overall Summary and Outlooks

The past decade in the Congo Basin saw the emergence of new forest legislation, international commitments to improve national forest governance and the impact of global economic trends on local forest management. Significant progress was made in the design of programs, laws and regulations, yet because of the challenges faced by the sub-region a more robust commitment by national governments to strengthen local forest management will be required to achieve management objectives. The Congo Basin forests are under increasing pressure to produce agricultural and other commodities, conserve biodiversity, sequester carbon and provide local livelihoods. Balancing these disparate interests will make the next decade especially challenging.

After decades of relative stability, the extent and condition of Congo Basin forests may now be entering a period of rapid change, a kind of transformational cycle. There is a proliferation of new infrastructure under construction in the region, which is opening up areas that have previously been relatively inaccessible – and much more infrastructure is planned. Much of this infrastructure is driven by investments in extractive industries. This infrastructure will greatly facilitate logging, but it also seems highly probable that colonists and investors will develop agriculture along these roads. Similar infrastructure investment is occurring in the DRC with roads

penetrating into the forest zone from the densely populated East African countries. These roads are encouraging the mining of minerals such as gold, coal and coltan and are also allowing timber and agricultural crops to be transported to the growing markets of East Africa.

Infrastructure can focus development efforts, and roads and railways can provide opportunities for development corridors to improve market access. Optimists see such development corridors as an opportunity, because farmers and associated services can be concentrated in smaller areas and this might lessen the pressure on remote forests. There might be a shift in patterns of population and agriculture development in coming decades, which might lead to more intensive and profitable agriculture in accessible areas and an exodus of people from remote forest areas, which could be a win-win scenario. However, pessimists see development occurring in an opportunistic way throughout the Congo Basin with catastrophic results for the environment and the potential for problems of governance.

Other changes are occurring that will determine the future of the Congo Basin forests. World demand for food crops and biofuels is expanding rapidly. Oil palm, soy, sugar and other industrial crops are expanding into areas of the Congo Basin where land resources are presently



Photo 9.12: Laterite quarry, Gabon

under-exploited. Many international investors are exploring options for investing in the forest zone and the new and planned infrastructure is providing an incentive for investment. At the same time, timber harvesting may be less profitable. Markets for high-value timber in Europe are declining and rigorous certification rules make it more difficult to access African timber. The traditional vertically integrated timber trade, with loggers in the Congo Basin linked to manufacturers of wood products in Europe, may be giving way to a less integrated trade sector similar to many other internationally traded commodities, where products find their way to Asian markets. Prices in Asia are lower and the loggers have less long-term commitment to the market chain in this scenario.

There has been an expansion of interest in payments for environmental services in the Congo Basin forests. REDD+ has the potential to compensate governments and local people for avoided deforestation and should encourage forest conservation. However progress in getting REDD+ to a stage where it can be operational

at a sufficient scale is slow. Doubts are emerging as to whether carbon buyers will be able to offer carbon prices equal to the opportunity costs of tropical forests and whether regional governments will be able to put into place sufficiently strong institutions to manage these complex programs.

The resources available to fund conservation programs have never been greater. The Congo Basin Forest Fund managed by the African Development Bank has joined the ranks of bilateral funds supported by Germany, France, United Kingdom and the USA, which, together with private foundations and NGOs, are supporting local and landscape scale conservation initiatives. While much progress is already being made on the ground, procedures are often onerous and the disbursement of funds to the field is slow. The Congo Basin forests are poised for change. Interest and funding for their conservation has never been greater but the pressures on forest resources are also mounting. Populations are growing and droughts in dryer areas around the Congo Basin may encourage people to move towards the more humid regions. Climate change

will have an influence on all dimensions of the Congo Basin, on its forest, its biodiversity and its agriculture. A mosaic of forest and non-forest areas is likely to emerge in the future; this outcome could allow for people's increased prosperity as well as the sufficient conservation of forests to ensure the region's exceptional biodiversity.

Alongside ecological and economic issues, forest land and resource allocation and use are also challenged by secular social issues. The sub-region is home to communities of hunter-gatherers (forest-dependent, considered as indigenous people), living besides Bantu communities. Most of the currently acquired concessions, notably mining and logging concessions, are also reserves in which these indigenous people ensure their livelihoods. In addition, community rights to

land and forest resources have been disqualified by the concessionary model since the colonial period. There is a need for strategies and policies giving a substantive recognition, with secure tenure rights, to local communities and indigenous communities. There is a need for alternative policy options and an alternative vision taking into consideration these social issues. In addition, due to the lack of reliable data on all the aspects of land use and land investment in the Congo Basin, the context and challenges presented here are only partly understood. Therefore, there is a need for data collection and knowledge sharing on the new expansion of the concessionary model in the sub-region. The next State of the Forest Report should deepen our knowledge of the context and challenges.



Photo 9.13: Dugout canoe in front of a raft of logs – Bandundu Province, DRC