1. Legal framework for land tenure in forest areas

The CAR has a legal and regulatory framework for land tenure that can be noted in different texts and laws, including the Constitution, the national land law and sectoral laws (Forest Code, Environment Code, etc.).

1.1 The Constitution

Article 14 of the Constitution of 27 December 2004 stipulates that, “All natural and legal persons have the right to property. No-one may be deprived of their property except under legally established reasons of public use, and on payment of fair compensation.” This same article emphasises that, “The property and goods of individuals, along with the nation’s heritage, are inviolable. The State and regional authorities, along with all citizens, have a duty of protection in this regard.”

1.2 Land legislation

Land legislation in the CAR is governed by Law No. 63,441 of 9 January 1964 on the national domain. Land is State-owned, through right of sovereignty. As a prerogative of public power, the State has the exclusive faculty of allocating temporary or permanent ownership or use rights to natural or legal persons undertaking to improve the land. Land ownership is defined by the land (property) code and customary law, of which written law forms a part.

Articles 2 and 38 of Law No. 63,441 recognise villages (settlements) the free use of lands presumed to belong to the State. A Decree dated 26 March 1999 establishing the land ownership system stipulates that land ownership is accessed and land title acquired by means of a registration procedure. However, the law also recognises use rights to people and groups who, in practical terms, have an individual hold over rural plots, resulting in their effective improvement, in line with current use and the location and allotted purpose of the land.

The legal texts that make expropriation procedures possible in the CAR include: Order No. 88,005 of 5 February 1988 on the creation of regional authorities and administrative districts; Order No. 88,006 of 30 April 1988 on the organisation of regional authorities and administrative districts; Decree No. 89,304 of 30 November 1989 organising the Ministry for Regional Administration and National Security.

In practice, in the forested areas of the south-west of CAR, because of an overlapping of players and interests, constitutional rights have taken precedence over customary rights, though the latter are partially integrated into the law. However, these rights are still exercised on certain levels (right of access to water sources, to farmland, etc.). In the south-east area, the existence of some locally recognised “customary legal” principles can be noted (Mogba et al. 2000). These are being exercised at the level of “territory” (‘terroir’ - “area over which a society claims and guarantees rights of access, control and use” (Joiris, 1996), including:
• genealogical rights conferred by belonging to a lineage and family;
• individual and family rights whereby each village has a specific territory divided into family plots bearing the names of heads of families;
• ownership rights through heritage, taking into account inheritance of resource rights, particularly following a death;
• ownership rights due to improvement, taking into account individual rights of control, open access rights and free access rights.

1.3 Forest legislation

The notion of forest management, combining the search for economic performance with social and environmental dimensions of sustainability, was developed in the CAR in the early 1990s.

The Forest Code, Law No. 90,003 of 9 June 1990, comprises a number of provisions relating to use rights. Articles 15 and 16 indicate that “local populations shall continue to exercise their customary use rights freely, in accordance with the provisions of this law, current regulations and customary law”. The exercise of these rights is, however, limited to “satisfying the personal, individual or collective needs of users”. These rights relate to resource use (gathering, collecting wood, etc.) rather than access to the land, which remains State-owned. Moreover, in national parks and other conservation areas “no-one may live permanently and no activity other than that necessary for the management, conservation or restoration of the natural wealth that forms the object of its creation may be undertaken.”

In 2003, general forest sector reports specifically recommended adapting the Forest Code to international and regional contexts. In particular they indicated that, “national participatory management initiatives for a fairer and more equitable sharing of forest resources are important but, unfortunately, few and far between. (...) The Ministry for Waters and Forests must seek to capitalise on these community initiatives, to deepen their experience and, if possible, replicate them in existing community forests. In addition to recognising the rights of these grassroots communities to their lands, the very notion of community forest and terms and conditions for their management need to be integrated into the Forest Code which, thus far, does not include this” (Etats généraux du secteur forestier, 2003).

On 17 October 2008, the President of the CAR enacted a new Forest Code (Law No. 08,022) that takes recent developments in forest management into account. This code - the result of greater consultation and interdisciplinary and interministerial cooperation - sets itself the objective of providing a legal framework for the sustainable management of forests, and for the perpetuation of all their values and functions.

Importantly, Article 5 of the new code divides the national forest domain into permanent and non-permanent forest domain, a distinction which carries with it different treatment of local community rights.

1.3.1 Permanent forest domain

According to the Forest Code:

“The primary purpose of permanent forest domain is the production of logs, goods and services, along with the protection of biological diversity and of the water systems. It comprises the following forest areas: The forests in the south-west of the country, which are of a productive vocation, subject to the policy of sustainable management; the forests of the south-east, which have multiple vocations, including biodiversity conservation; the savannahs. It includes: The State’s forest domain: ecologically fragile forests, production forests, recreational forests, scientific forests, botanical gardens, State zoological gardens, national parks, protected areas, reforested areas, wildlife reserves, environmental or biosphere reserves, integrated natural reserves, special reserves, wildlife sanctuaries, plant life sanctuaries, hunting sectors and buffer or pre-park areas; The forests of public domain.”
Section II of Chapter I of Heading II of the Forest Code, which comes straight after the General Stipulations and definitions, is devoted to customary use rights, including those of the indigenous peoples. In the forests of State domain, the code recognises customary use rights to the forest land along with the possible marketing of some forest products other than ‘construction timber’ (Article 15).

However, although the Forest Code guarantees customary use rights to indigenous peoples, Article 14 stating this principle also emphasises - in the same sentence - the fact that these rights do not take precedence over certain current legislative texts.

In addition, the Code stipulates specific measures in favour of indigenous peoples. This relates particularly to the preservation of some of their customary use rights, if they were already living in a protected area prior to its classification (Art. 17 para 2), and a prohibition on their eviction from lands they were occupying prior to the creation of protected areas, their relocation being exceptional and not to be envisaged without the free and informed consent of those concerned (Art. 18). Article 16, however, anticipates that the Minister responsible for forests may, for reasons of public use, “suspend or withdraw, in part or in whole, the exercise of use rights” on a temporary or permanent basis.

The Code also lays down provisions relating to the small-scale exploitation of permanent forest domain, this being possible in areas (‘séries’ or ‘séries agricoles’) designated for local people’s use in the PEA (Permis d’exploitation et d’aménagement / Forest management permit) management plans (Art. 24).

Industrial exploitation of the forest area for the purposes of selling the produce must be conducted within the context of the Forest Code and is subject to authorisation. Article 33 of the Forest Code thus stipulates that, “Any concession of a part of the State’s forest domain with a view to its industrial exploitation is subject to the prior consultation of local populations, including the indigenous peoples”. This provision is aimed at reconciling local and indigenous communities’ rights with the interests of the logging industry. The methods of prior consultation are established by regulatory means.

1.3.2 Non-permanent forest domain

Article 124 defines non-permanent forest domain as being all forests and lands that may be allocated to uses other than forestry. It includes: The forest domain of the public authorities; Forests owned by individuals; Community forests.

Article 125 of the Code stipulates that a forest belongs to a particular public authority if it forms the object of a classification ruling in favour of that authority or if it has been reforested and managed by this latter for the benefit of the local population. Public authorities cannot clear their forest without authorisation from the Forest Authority (Article 126).

As for individually-owned forests (Article 131), these are forests classified to the benefit of individuals or legally constituted groups of persons, or forests planted by them in an area they own by virtue of the legal and regulatory provisions.

Community forests form the object of a management agreement between an organised and interested village and/or indigenous community, on the one hand, and the State, represented by the Forest Authority, on the other (Article 133). This agreement is “a contract by which the Forest Authority entrusts a portion of national domain forest to a community with a view to its management, conservation and use in the interests of that community”. The code specifies that “forests that form the object of a management agreement shall be those located on the outskirts of or close to one or more villages and/or indigenous communities in which the people are undertaking subsistence activities”.

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A specific heading of the Forest Code (Heading V) addresses “participatory management”, i.e. the involvement of local people in natural resource management. This is defined as “a method of natural resource management involving the stakeholders in decision-making related to activities of protection, restoration of the ecosystem and promotion of timber and non-timber forest products within a clearly defined area”.

2. Description of forest mapping experiences

There have been two substantial experiences of ‘participatory mapping’ in CAR, on which information is available, consisting of:

- Project of Support to the production of forest management plans (PARPAF) in the demarcation and zoning of logging concessions (Permis d’exploitations et d’aménagement - PEA) in forest areas;
- Use of forests in and around the Dzanga-Sangha Protected Areas complex.

2.1 Project for Support to the production of forest management plans (PARPAF)

For the PARPAF, the aim of mapping is to obtain a basic, updated, operational and sufficiently detailed map within logging concessions (PEAs) that can be used to facilitate the planning of all field operations, including: determining the location of pre-inventory zones by forest type; conducting a typical survey for implementing inventory works; monitoring track routes; Location of logging areas. It is also useful when producing thematic maps (forestry map, management map).

In general terms, PARPAF uses topographical maps updated to 1:200,000; Landsat satellite imaging; recent aerial photos, for example, those from 2002, 2006 and 2008; Arc View 3.2 software coupled with an inventory data inputting software developed by CIRAD.

To date, all the socio-economic studies have been (or are in the process of being) conducted in relation to the 11 logging concessions covering around 3 million hectares of the south-west forest area.

2.1.1 Example of the socio-economic study in the context of producing the management plan for the Société Centrafricaine Forestière (SCAF), which holds Logging Concession (PEA) 185

Logging Concession 185 is located in the northern part of Sangha-Mbaéré prefecture and covers a total area of 270,000 hectares. This prefecture stretches for approximately 19,500 km² and has a total population of 101,074 inhabitants (see Figures 1 and 2 below). According to the study:

“The study aims in particular to list the populations present in the logging concession, to identify their links with the forest area and the resources they draw from it, to identify resource people capable of serving as links with the logging company and local authorities, to understand local ways of using the different natural resources, the rules of access and their geographical location, to find out about any possible land conflicts and priority social needs and, finally, to analyse the living conditions of the company’s beneficiaries (‘ayant droit’) in the area of its site facilities.”
According to the study, “Not all the villages located inside or on the borders of Logging Concession 185 could be taken into consideration because of the time allocated for this study. There are a total of 49 villages and permanent settlements, plus the administrative centre of Nola. Twenty-three villages were therefore chosen on the basis of selection criteria, and in the most representative manner possible, out of the whole of the logging concession”. In these, a series of surveys were conducted combining individual and group interviews, the use of questionnaires and the production of maps by the inhabitants. The study collected a pool of information on the ethnic composition of the villages, “showing that the numerically largest ethnic group within the concession was the Bayaka (Pygmy) group, representing approximately 21% of the population...”

In terms of overall population of the area, the study found “The total population present in the logging concession in 2006, excluding Nola town, is estimated at 36,462 people, giving an average density of 13.5 inhabitants per km², of which 48% were men and 52% women.”

The history of the villages, the flows of people into the area and household composition were also noted in detail.
Figure 2: villages in Logging Concession 185 (source: MEFCPE / PARPAF)
In terms of the relationship between inhabitants and the forest, the study found that “In addition to its
contribution to the quality of the environment, the forest provides a source of many food and domestic products for the local population within the logging concession. The conditions for accessing natural resources vary from one village to another, depending particularly on the origin of the people and the nature of the resources being used...Access to the land is generally free...”

The report found that “the village plots are almost contiguous due to the fact that there is no area of forest not being used by a village. These areas do not belong to any village in particular but rather to all surrounding villages. These areas are thus freely accessible to people coming from neighbouring towns or villages for hunting, fishing or gathering activities in the forest areas along the water course...The village territories were huge in all villages visited. In contrast, the areas under agricultural use were for the most part tiny, covering an average of one hectare. The people living in the area practise hunting and gathering over vast areas to satisfy their needs. These practises form a strong bond between the local population and the forest in Logging Concession 185.”

In terms of the distribution of village activities across the forest, the report noted that “The agricultural areas within Logging Concession 185 are most commonly located on the edges of the villages. Nevertheless, in 33% of cases, the crops are located further away. Cultivation areas are located within a distance that ranges from a few hundred metres to a maximum of 5 kilometres.”

The study also revealed the ‘renting terms’ of lands under customary ownership: “Access to unoccupied lands is free in 17 villages out of 24 surveyed, i.e. 71%; two villages out of 24, i.e. 9% said that you had to pay to access agricultural land...Access to fallow lands is always paying, as it is a family asset, unlike cleared land; the minimum price varies between 1,000 and 10,000 F CFA and the maximum between 5,000 and 50,000 F CFA per plot. Acquisition of agricultural land is most often subject to the decision of the village chief or elders, and sometimes obtained through contacts with village inhabitants. The rule has it that the land belongs to he who uses it first.”

The study does not make distinctions in the way the customary rights are structured. These rights are structured hierarchically firstly between communities and then within a community. For example, customs are often not recognized by Bantu communities, which should be taken into consideration when addressing indigenous peoples’ access to land.

After agriculture, small-scale mineral (especially diamond) extraction is the most important economic activity for the communities in concession 185. Mining sites can be found right across the whole area of the concession (see Figure 4), and the report found that “The rules for accessing mineral resources vary little from one village to another but are generally more restrictive than the rules for accessing agricultural land. Thus 20 villages out of 24 state that you have to pay to access mining areas. A miner pays for his right of access to the plot in cash once he has been able to sell the diamond(s) he has found.”

According to the report, “Hunting is practised in all seasons throughout Logging Concession 185, in the areas around the villages, in the surrounding forests and beyond the boundaries of the territories. There is no area specifically reserved for this activity. The people hunt everywhere in the territories...Gathering and collecting of non-timber forest products is of great importance for all people living in Logging Concession 185, whose daily survival depends on it, according to 87% of the people individually surveyed. This activity takes place on the edges of villages, in the surrounding forests but also outside the village territories, according to 36% of villages surveyed.” (see Figures 5 and 6)

The Study also found that, of the villages surveyed, 10 have sacred sites (know locally as ‘Mbassi’) located mostly on their village territories. The significant of these sites to the local inhabitants was indicated in the finding that “local people conduct ancestral practises to implore the power of the spirits of their ancestors in the case of a difficult situation judged to be life-threatening to the community” (see Figure 7).
Figure 4: mining areas in Logging Concession 185 (source: MEFCPE / PARPAF)
Figure 5: hunting areas in Logging Concession 185 (source: MEFCPE / PARPAF)
Figure 6: gathering areas in Logging Concession 185 (source: MEFCPE / PARPAF)
Figure 7: location of sacred sites in Logging Concession 185 (source: MEFCPE / PARPAF)
2.2 The Dzanga-Sangha Protected Areas (APDS)

Maps have been used to determine the use of spaces in and around the Dzanga-Sangha Protected Areas (APDSs) (See Figure 8). The APDSs are situated to the north of the equator, between latitudes 2°13’ and 3°24’ north and longitudes 15°30’ and 16°35’. They are bounded to the north by the sub-prefecture of Nola, to the east and south-east by the Republic of Congo and to the west and south-west by the Republic of Cameroon. The vegetation generally comprises dense moist forest dotted with clearings known as ‘bai’, dry or semi-wet meadows rich in mineral salts (Magliocca and Gautier-Hion, 2001).

A good part of the Dzanga-Sangha Reserve was cleared of the dominant *Entadophragma* tree species between 1975 and 1982 by the logging companies. The human population is estimated at 6,188 inhabitants in the Reserve, with an average density of 1.8 inhabitants/km2. The native ethnic groups of the region are the BaAka Pygmies, and the Sangha-Sangha, a fishing people.
Figure 8: use of areas in and around the APDS (source: APDS 2005)
As with the PARPAF studies, the reports prepared by the project provide interesting information on land occupation use, such as for the Bomandjokou “série agricole” area described as an example below. This was produced in 2008 by the World Wide Fund for Nature (WWF) and German Technical Cooperation (GTZ/GFA).

2.2.1 Example of land occupation in the Bomandjokou agricultural “série agricole” area

In October 2008, the Bomandjokou village chief requested that the current boundaries of the farming strip (agricultural area) be increased, citing as his reason the fact that the young people (i.e. young families that had recently set up home together) could not find any land on which to sow crops. Following this request, a field mission went to Bomandjokou to assess the situation of current agricultural land occupation, on the one hand, and to update the socio-economic data, on the other.

The following specific objectives were identified for this study:

- To test a new methodology in order to produce a map that would show the natural attributes (river, streams, brooks) and communication channels (roads and tracks) around the village as well as all agricultural plots, enabling local participation at each stage;
- To calculate the areas of all different categories of agricultural land use (new clearing, crops, fallow, reserved forest);
- To update the socio-economic data on households, including information relating to different sources of income;
- To clarify issues relating to access rights to agricultural land on a household, village and even agricultural decision-making level;
- It should be emphasised that the involvement of the farmers was perceived as key to the mission’s objectives, as the map produced was going to be used as a basic tool with which to stimulate in-depth discussions on land-use planning (including boundary adjustments).

The methodology used was the following:

- Before the work in the village, a map was projected showing a recent high-resolution satellite image (see Figure 9) of Bomandjokou (projected with the help of a small portable projector) and people found their bearings on the map and specified the location of different houses and even the approximate position of some fields. On this occasion, the villagers were also familiarised with the basic concept of a satellite image.
- Then, a GPS receiver was shown to the villagers and explanations given regarding this instrument.
- On this occasion, issues relating to the use of agricultural lands were also discussed.
The first stage of work was to produce a questionnaire taking socio-economic aspects into account, questions related to land access and the desire of households to grow crops or not. These surveys were conducted in all areas of Bomandjokou and in the adjacent Sengabato fishing encampment. If a young couple, already married, were living under the guardianship of their parents but owned a field, they were considered as a separate household. During this stage, the questionnaire was presented to each household individually and interviews were conducted with the head of household and his wife respectively.

The second stage was to conduct the field work. In this, each farming household took one of the field teams to visit its fields. Garmin GPS 60 receivers were used to trace the boundaries of the fields (See Figure 10). Tracklogs such as waypoints were recorded for each field. In the field, farming techniques and the history of the agricultural use of the field were discussed and noted together with the farmer.
Apart from the information recorded, sketches were drawn showing the size and shape of the field, and these helped the field teams to get their bearings (See Figure 11).

Figure 10: sketch of fields (source: MEFCPE / APDS)

The third stage consisted of transposing the data gathered in the field into the GIS and tracing the shapes of the different plots.

In order to encourage the local people's understanding, the file was presented using different colours corresponding to the different kinds of land use (crops, fallow, new clearing, reserved forest) (see Figure 12).

The fourth stage consisted of presenting the final map during a full meeting of the village (see Figure 13). The farmers were invited to identify and verify the location and shape of their plots, and they wrote their names on them (Figure 14). The meeting secretary did this for those who could not read or write. Since the aim of the meeting was to enable the villagers to draw their own map of agricultural land use, to serve as a basis for discussions on the future use of lands, no sizes of areas were indicated. The kind of vegetation around each field was also given (Figure 15).

To conclude the meeting, discussions were held on the rules for accessing land within the village and the problems encountered in land occupation. The approach resulted in a series of results, including:

- The compilation of socio-economic data on a population of around 200 inhabitants (ethnic composition of villages, household composition, agricultural activity, division of labour within households, etc.);
- A description of traditional methods of land access;
- Recommendations concerning the current use of agricultural areas and related problems.
Figure 11: map of land occupation drawn by the villagers (source: MEFCPE / APDS)
Figure 12: map of land occupation at Bomandjokou village, in GIS format (source: MEFCPE / APDS)
Figure 13: map of land occupation at Bomandjokou village with agricultural plot numbers (source: MEFCPE /APDS)
Figure 14: map of land occupation at Bomandjokou village with the names of farmers (source: MEFCPE/APDS)
3. Conclusions

The CAR has a series of legislative and regulatory texts that lay down the terms and conditions for occupying the forest lands and areas, which cover around 5 million hectares or 8% of the national territory (dense moist and semi-deciduous forest).

The State retains ownership of the land and recognises certain customary use rights relating, in particular, to the use of forest resources. The new Forest Code, enacted in October 2008, demonstrates significant
progress in this regard by introducing new provisions concerning customary use rights over forest lands and the possible marketing of certain forest products other than construction timber.

The Code also stipulates more specific measures in favour of indigenous peoples, whose way of life is inextricably linked to the forest, and in particular introduces a principle of non-eviction from certain areas without their free and informed consent.

In the context of forest management, all the areas allocated to logging concessions have been (or are in the course of being) mapped, under the auspices of a project of the Ministry of Waters and Forest, Hunting and Fisheries (the PARPAF project). The socio-economic studies involved in this mapping thus highlighted the local terms and conditions of land occupation and resource use.

In the forests of the south-west, mapping experiences related to logging concessions have provided substantial information on the socio-economic features of the area and traditional terms and conditions of access to, and use of, forest resources. Other experiences, focused around the Dzanga-Sangha Protected Areas, used participatory methodologies to obtain information on the use of land and to contribute to the dialogue between local populations and those responsible for managing these areas.

In the implementation of the new forest legislation and in the development of national land use policy, participative mapping should be developed.

- To inform and take into consideration traditional rights including the different layers of ownership, control and use allocation rights;
- To facilitate the exercise of Free Prior and Informed Consent of local populations, and inform methods of prior consultation;
- Methodologies of participative mapping exercises are key in the perspective of ensuring sustainable forest management. Furthermore, other than informing forest law, mapping initiatives should hence strengthen capacities of local populations to play a relevant role in the political processes that directly impact on their livelihood. Participative mapping should hence help local communities to understand their rights to access and use forest resources and to express the way they want to be represented in the local and national processes dealing with forest management;
- Specific activities should target marginalised indigenous populations who represent an important minority of CAR forest population and who strongly depend of forest resources for their survival and development. These communities have an extensive knowledge of forest ecosystems which represent a very rich patrimony for the country;
- Participative mapping methodologies should put local and indigenous communities in the centre of each stage of mapping processes: i.e.: agenda should be discussed locally as soon as the project/activity starts, local populations should actively participate to technical GPS/GIS work, and community ownership of the maps should be discussed and improved;

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