1. Introduction

At present, although there a number of maps from the Democratic Republic of Congo (DRC) purporting to represent “participatory zoning” or some form of participatory land use planning, there are, as yet, no formally recognized maps that take community ownership and control of forests and natural resources into account. Access to and control of forests and other natural resources is highly contested. Indeed, one of the main causes of the DRC’s many years of horrifying civil war is understood by many to be conflict over those very natural resources.

In such a context, maps, the making of maps, and the identification of customary rights is delicate and controversial. Nonetheless, the DRC government is receiving support from a number of bilateral and international partners to develop its own capacity for managing geographic information and to put in place a new legislative and policy framework. At the same time, civil society organizations and community activists are mobilizing to support communities in documenting their rights and land use and in gaining a voice in decision making processes which will affect their lands and livelihoods.

This paper will examine the current formal legislative framework, followed by the mapping and zoning initiatives that are underway in the DRC and the few attempts that are being made to document and understand the nuances of community rights to lands and resources. It will finish by making specific recommendations as to priorities in the DRC.

2. Formal legislative and policy framework

In the formal national legislation of the DRC, there are a number of statements about ownership and control of land and natural resources and the degree to which communities can have access to forests and forest resources. These are covered by the Forest, Mining, Land, Nature Conservation and Agriculture Codes. As part of its overall legislative overhaul, the Forest and Mining Codes have already been revised and updated, in 2002 and 2003 respectively. A text for both a new Agriculture Code and a new Nature Conservation Code is being considered by parliament at present, and the Land Code is also due to be revised. With all this legislative change, the time is ripe for DRC’s forest dependent communities to assert their right to be recognized and taken into account.

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2.1 Forest Code

The Forest Code has been the subject of a number of extensive critiques\(^3\). For the purposes of exploring the potential of the recognition of community rights in DRC law, this analysis will focus only on those articles or decrees which may have a significant impact on community tenure or user rights.

In terms of ownership, Article 7 of the Forest Code declares all forest to be property of the State – and Article 1 defines forest as any land with trees or bushes that can produce forest products, act as home to wildlife or have an effect on climate or soils, or any land that previously had such vegetation on it. Under Article 9, however, trees in or near villages or in collective field are recognized to be collective property of that village or the owner of the field.

The Forest Code defines local communities as communities that are traditionally organized on the basis of custom and united by clan or family links. They are characterized by their attachment to a specific territory. This definition is also referred to in the new draft Nature Conservation Code.

Under the Code, although communities cannot assert ownership rights, they are in principle permitted user rights for subsistence only in all types of forest other than certain classifications of protected area and can apply for a community concession, (probably valid for 25 years), based on customary possession of that forest land (Article 22). Commercial exploitation of forest products harvested under those traditional user rights is not permitted. However, commercial exploitation of forest products and, in particular, artisanal logging, (Article 112), is permitted in “forests of local communities”, (Chapter III), although the nuances of “forests of local communities” and “community concessions” are as yet to be clarified via implementation decrees to the Code.

Forest classification – the allocation of forest land to one of three categories – classified, (formal protection with some kind of protected area status), permanent production, (commercial exploitation, normally for timber), or protected, (all other areas of forest) - is supposed to be dependent on a prior consultation with local communities and after agreement with the provincial consultative committee.

2.2 Nature Conservation Code

This code, still in draft form but expected to be approved soon by the Congolese parliament, deals with those areas of land termed as “forêts classées” under the Forest Code, and retains the same definition of local communities as the Forest Code. It also declares all Congolese fauna to be property of the state, (Article 8). However, the Code does contain substantial improvements in terms of rights to traditional knowledge and rights of communities to share the management of protected areas and to benefit from the management. Nonetheless, other than in the domain of traditional knowledge, the rights of forest communities are not articulated or paid specific attention to.

2.3 Mining Code

The Mining Code includes no reference to local communities in the allocation of mining concessions or in managing mining operations. Indeed, there is no obligation on those

\(^3\) RF papers, etc
applying for a mining concession to do any kind of social impact assessment. The language used in this code is “occupants of land”, defined as “ayants droits”, (rights holders – who are not defined at all in the text), and the mining concessionaire is supposed to compensate them for damage done during mining operations. The only land that is protected from mining operations is that in a national park, a cemetery or one with archaeological remains in it. Mining operations are also not permitted within 90 metres of a village or town. Local communities are effectively invisible in this Code and appear to have almost no rights, particularly the right to grant free, prior and informed consent to use of their lands.

3. Mapping initiatives in the DRC

There is a range of mapping initiatives taking place in the DRC at present, although few of them include a specific focus on community land rights or community use of land and natural resources.

At a national level are a number of mapping and zoning activities that are intended to promote government capacity for natural resource management. These have tended to involve government bodies and institutions responsible for mapping and managing geographic information - either strengthening the capacities of existing institutions, in the case of the forest sector which has seen FAO- provided support to Permanent Inventory and Forest Management Service - SPIAF, or installing or restructuring new services, such as the World Bank-funded support to the Mining Cadastre.

For example, as can be noted from the map below, the allocation of mining concessions has been carried out on a purely map-based allocation of geometrically similar blocks. The resultant map reflects nothing of the topographical or vegetational characteristics of the land thus allocated, let alone the occupation, use, ownership, control and traditional rights to the land and resources of the human inhabitants.

![Figure 1: Mining concession map of Kasai Orientale and Occidentale, DRC. From the DRC Mining Cadastre website: http://www3.gaf.de/cgi-bin/mapserv](http://www3.gaf.de/cgi-bin/mapserv)

The Mining Cadastre support was delivered by a private sector company, GAF. This support has included the establishment of a website for the Cadastre on which can be seen maps of mining concessions allocated within the DRC: [http://www2.gaf.de/cami/](http://www2.gaf.de/cami/)
3.1 National Forest Zoning Plan

The Food and Agriculture Organisation of the United Nations has supported a number of processes in the delivery of forest policy in the DRC. At national level, they have been providing support to SPIAF and have developed a “pilot zoning methodology” in the area of Lisala and Bumba in northern Equateur province.

This process involved starting with a review of existing maps and satellite images of the area in question, from which an overall map was developed, which identified such features as forest cover, conservation potential, occupation of land (based on satellite images), and forests with production potential (based on existing inventories and records). Then a projection was made of expected demand for agricultural land over the next 25 years, (the methodology for this part of the process has not yet been published), and another map made of expected demand for agricultural land. From these analyses and projections, an “indicative zoning map” was produced. This map was then taken to meetings in Lisala and Bumba towns, with community representatives and with logging companies, for review and adaptation based on that feedback. As far as the author understands, no detailed mapping with communities was carried out and no analysis of community use or traditional rights to forests and forest resources. Because occupancy was only assessed from remote sensing images showing areas under cultivation, the presence of any hunting-gathering communities in the area was not identified. The final map can be seen below in Figure 2. It can be noted that, despite the marked lack of any participation in its derivation, it was still described as a ‘participatory zoning map’.

Figure 2: “Participatory” zoning map of Lisala-Bumba area. The areas in pale green are those to be allocated to “permanent production forests”
When it comes to initiatives that map forests, land use and communities, at a province, “landscape” and local level, the key actors have been NGOs – either large, international conservation organizations such as the Wildlife Conservation Society – or Congolese NGOs, sometimes supported by international partners.

2.2 Wildlife Conservation Society, Ituri-Epulu-Aru landscape

The Wildlife Conservation Society (WCS) has approached community mapping as a tool for zoning protected areas for conservation. Their approach has been driven by an interest in managing access to certain areas of forest considered important to wildlife. The basis of the work has been biological surveys, identifying key habitats and areas considered critical to wildlife. However, there have also been socio-economic surveys carried out and two pilot participatory mapping exercises in areas identified by the project co-ordinators, (WCS and ICCN, the Congolese Nature Conservation Institute), as being appropriate for community based natural resource management. The data gathered from these processes was used by WCS and ICCN to develop proposed zoning maps which have then been presented to community representatives for validation. The main zoning map for the Ituri-Epulu-Aru landscape (in Orientale and North Kivu Province) is shown below in Figure 3. Within this main outline zoning, WCS has been carrying out smaller scale zoning activities, identifying community hunting zones and other areas where communities can carry out activities. One positive aspect of this initiative is the attention paid to the specificities of the hunter gatherer Bambuti communities. However, overall the process has been one of consultation on maps prepared by conservation bodies rather than on the production of maps by communities themselves; the discussion of rights as opposed to use has not taken place.

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5 “Landscape” is a term used in some DRC legislation and frequently used by DRC policy makers. The term is one used by CARPE (Central Africa Regional Programme for the Environment) to describe landscapes of high conservation value in the Congo Basin. Of the 12 landscapes identified in the region as a whole, six are found in Congo and each has been, in effect, allocated to one or other of the large conservation organisations: Salonga-Lukeni-Sankuru, Virunga, Maïko-Tayna-Kahuzi-Biega and Lac Télé-Lac Tumba to WWF; Maringa-Lopori-Wamba to AWF and Ituri-Epulu-Aru to WCS.
Figure 3: Zoning map of Ituri-Epulu-Aru.

2.3 Worldwide Fund for Nature, Salonga National Park

WWF has been developing mapping initiatives in and around Salonga National Park. Here, interestingly, park managers and WWF staff acknowledge that people live in and depend on the park for their own subsistence and indeed that communities see all the park lands as being their own. However, all participatory mapping exercises have only been undertaken outside the park (see Figures 4 and 5 below).
As was the case with the process that WCS facilitated, the mapping work has been defining land use by communities, limited to land outside the boundaries of the national park. Identification and discussion of rights has not been formalized in any way in the maps produced, although some WWF staff recognise that communities perceive the forest to be ‘theirs’.
2.4 African Wildlife Foundation, Maringa-Lopori-Wamba landscape

Another tool used by all the conservation groups in their mapping has been the MARXAN mapping software which has been used to analyse data from biological and topographical surveys as well as basic data on human populations to map out areas with high conservation potential and areas in which biodiversity might be considered under threat. The assumption in this case is always that more people means less wildlife; the nuances of land and resource use traditions are not included. The example of how such analysis has delivered land use planning can be seen from the process that the African Wildlife Foundation (AWF) has used in its landscape planning. Below, in Figure 6, AWF have identified key areas of “threat” to be taken into account in the Maringa-Lopori-Wanga landscape. Once again, communities have not participated actively in the preparation of maps and no analysis of the rights of communities to the lands and resources concerned has been carried out.

![Figure 6: Landscape connectivity in Maringa-Lopori-Wamba landscape, AWF/USFS](image)

2.5 WWF and SAFBOIS logging concession

WWF have also been active in what has been termed “micro-zonage”, working with logging title holders, SAFBOIS, in a logging area in Orientale province to carry out zoning activities in a forest concession. Interestingly, this process did include the identification of the areas controlled by individual “groupements” (the smallest administrative unit in the Congolese state and one that sometimes can coincide with traditional clan or community lands). It also included identifying that communities wished to use all of the land in the area covered by the logging title and wished to have certain sites specifically protected (see Figure 7). However, the challenge here is that the discussion concerns land and resources that the

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state has allocated in advance to external actors without consultation or consent of the communities concerned. Hence the process, although more thorough in recognizing the overlap of rights and uses, is starting from a point in which rights have already been ignored and overridden in the major land and resource allocation affecting that land.

Figure 7: Zoning map of SAFBOIS logging title including conservation areas and scared sites

2.6 Ushahidi conflict mapping

An example of another type of initiative, which does not address community rights but which does represent a use of geographic information technologies for tracking issues that have a profound effect on communities – and which does offer scope for participation from a local level, given access to the appropriate equipment - is the conflict tracking initiative
developed by Ushahidi\textsuperscript{7}. This allows people to send in descriptions of conflict incidents using an SMS message or by filling in a form on a website and these incidents are recorded and added to a map which is updated regularly to track incidents.

2.7 Natural Resources Network/ Dynamique Autochtone/Rainforest Foundation territorial mapping

The most substantial mapping with communities to date in the DRC has been that carried out by members of the Natural Resources Network (RRN) and the Dynamique Autochtone with the support of the Rainforest Foundation UK and Norway and the Centre for Environment and Development (CED) in Cameroon.

This participatory mapping has so far mapped the land-use of forest communities covering more than one million hectares. A publication explaining the process and illustrating an exercise of “Territorial Mapping” is in production at present, awaiting final validation from participating communities in the Territory of Inongo, Bandundu Province.

At present, the methodology being used is one that supports community members themselves to choose what to map and then equips them to produce their maps, a final georeferenced version being produced by a collaborating local NGO and validated by the community that has produced it. So far, the maps have focused on the areas that forest communities use, both for cultivation and for other practical and cultural ends, as a starting point. Data from official maps of the limits of logging titles, national parks and other land use allocations has been included so that all actors can clearly visualize some of the challenges that communities face. This has already allowed for a clear demonstration by communities of the superposition of external actors with their own interests. In some cases, the maps have already been used as an effective lobbying tool to assert rights and to negotiate with other actors.

In the map in Figure 8 below, for example, the community has clearly shown that its land and land use extends well into an area allocated to a logging title – and that the activities of the logging company extend outside the boundaries of their title area.

\textsuperscript{7} Ushahidi is an open source web project developed originally by Kenyan journalists to track incidents during Kenya’s recent unrest. It has been further developed into a conflict-tracking resource and is being tested in Eastern DRC. \url{http://www.ushahidi.com/}
Figure 8: Community map produced by the community of Mpole, Bandundu Province, showing where community activities take place

This initiative is also the only one that has been costed and the results of that costing made public. The estimate made by the partners is that to support communities to map two sectors of Inongo province cost less than $0.20 per ha. However, that process did involve a large team of people and it has taken a lot of time on the part of the communities.

3. Other initiatives exploring community perceptions of their rights to forest resources

As well as mapping initiatives, there are three other initiatives which are starting to touch on community perceptions of their ownership and control of forest use. These initiatives, led principally by Congolese actors rather than external ones, include both literature reviews of the legal context and work with communities themselves exploring understandings of forest use and control and ways in which communities wish to see these formally recognized to secure customary rights and resolve conflicts.

Le Conseil pour la Defense Environnemental par la Légalité et la Traçabilité (CODELT) and Avocats Verts have been taking a legal approach, assessing the relevant legislation and how it formalizes any rights recognition. Their conclusion is that there is sufficient space within the existing legal system to incorporate customary rights. However, many others argue that at present, written law and formal law always supercedes customary law and certainly in practice this seems to be the case. Indeed, within the formal written law, certain allocations always supercede others: mining concessions take precedence over forest and agricultural concessions, for example, in practice.

Other groups have taken a more community-focused approach and have spent time exploring communities’ own understandings of the context. Most recent has been the initiative of Cercle pour la Défense de l’Environnement et de la Nature (CEDEN), supported
by the Rainforest Foundation. CEDEN held a workshop in January 2009 to explore the models of customary forest ownership and control that apply within the Bikoro region in the south of Equateur province and how these coincide or not with formal law. The outcomes of this were that:

- There was no area of forest in the Bikoro area to which traditional rights did not apply. (This finding has been repeated anecdotally by community members and staff of the administration and all forest and conservation organizations working in the field: it would appear that there could be no part of the *whole* of the Congolese forest to which traditional rights do not apply).
- Both Bantu and indigenous Pygmy people in the three communities involved had a very clear vision of which clans and families had formal customary control and could give permission to farm, to hunt, to collect, etc.
- All communities made it clear that it was *only* the people from these specific clans or families who could take decisions about land and forest use. Incomers were welcome to settle, but they did not have any right to participate in decision making.
- Community members were angry and frustrated at the official position on land and forest ownership and were ready and willing to contest it.

These findings, among only a very few which have actually been documented as yet in DRC, reflect anecdotal evidence from other field visits. CEDEN is planning to explore the ideas further with communities, in order to come up with recommendations for formal recognition of community management of forest lands that takes traditional management and community aspirations for appropriate management into account.

Another project, involving the RRN and Forests Monitor as coordinators, will also be exploring community understanding of forest issues in Orientale, northern Equateur and Bas Congo. This work and that of CEDEN will both contribute to submissions to the DRC government as it develops its policy on the management of forests by local communities.

4. Recommendations

- In the development of national land use policy, to start with the mapping of traditional rights, and to bear in mind the nuances of these rights: there will be different layers of ownership, control and use allocation rights overlapping one another and different communities and clans will have different rules. These have to be understood in order to know who should be included in decision making.
- To take into account the ways in which traditional rights and the powers of traditional rights holders have been distorted over the years and to explore with communities ways in which they wish to represent themselves and negotiate with others who wish to use their land. These approaches must include consideration of groups who are frequently marginalized: indigenous “Pygmy” peoples, women, members of communities not from ruling clans, etcetera.
- Increased input to and support for participatory mapping initiatives that take the above issues into account and genuinely put communities at the centre of the process and assert their ownership of the resulting products. The work currently being undertaken by the RRN is a good example of this.
- Continuation of the current moratorium on the allocation of new logging concessions in the DRC until such time as mapping and recognition of rights has taken place.
• Clarity in national policy that forest zoning and the recognition of rights are two separate processes and both must have taken place before further land use rights can be allocated.

• Continued exchange between those groups active in the field so that mapping and the recognition of land rights can be harmonized. (An initiative to explore the possibilities of harmonizing approaches is due to be launched by local NGOs and community groups in South Kivu together with the Rainforest Foundation, WCS and WWF this year)

• Development of application decrees on community management of forests that incorporate a thorough analysis and understanding of communities’ perceptions of their rights and takes these into account in the allocation of community forests, and that is not restricted in terms of area. (Two initiatives are underway that are exploring this: the work of CEDEN supported by the Rainforest Foundation and the work of the RRN, MECNT and Forests Monitor)