



should be to reach consensus on the results. This step needs to be well documented and minutes need to be taken and signed by all persons present. This meeting should be held with all stakeholders of the micro-zoning project together.

A similar procedure should be followed with the map drawn with the indigenous population (IP). Here, however, the relation between the IP and the villages should be taken into account as they are often delicate and not based on equality. Traditional IP lands almost certainly overlap with village terrain. This overlap is caused by differences in use and different views on territory. It may

be needed to include independent people to help verify boundaries of the territory of indigenous people.

### 8. Processing the data

The data (sketches, GPS data, remarks, notes and minutes from the meetings) are taken together to produce thematic maps of village territory, customary lands and indigenous peoples territories. When the data have been verified and treated in the GIS system, maps are produced.

### 9. Restitution of the results to the communities

The maps are presented to the inhabitants of each village. After the presentation the maps and copies of all minutes of meetings and additional information are handed over to the community.

### 10. Restitution of the results to the authorities

The GIS database, the maps produced and copies of the minutes of the various meetings are handed to the authorities so this basic information can be integrated into the lands management system of the local, provincial and national government. The ideal situation in the case of the DRC would be that a registry is created containing all the information of the micro-zoning.



Photo credits: All photos from the report 'Micro zonage participatif dans les territoires de Lukolela et d'Inongo en République Democratique du Congo', September 2014

# Participatory micro-zoning



## A review of experiences on micro-zoning in DRC

### Introduction

Micro-zoning is a way to undertake the prior consultation of local communities, needed for the preparation of forest management. It will form the basis for all initiatives for management and the conservation of biological diversity as these activities can only be successful if the rights, needs, interests and the knowledge of local communities and indigenous peoples are taken into account.

The methodology developed in this pilot on micro-zoning can inspire work in various domains such as forest management and mining. The project has been undertaken by WWF and the Congo Basin Program.



### What is micro-zoning?

Micro-zoning is a participatory process of mapping the living and working space of communities. Micro-zoning allows communities to map informally claimed lands and to make clear how lands are used. The activity is undertaken at community level. Micro-zoning is usually a guided process, where a party collects the information of various communities and uses it to create maps covering the land-use and living space of a multitude of communities in a given area. It is a process of training people to understand how maps work, collectively drawing maps, collecting GPS information and transforming the information into a map that is acceptable by consensus.

### The objectives of participatory micro-zoning

The principal objective of micro-zoning is to reduce the prevalence of conflicts related to land-use, to acknowledge local actors and stakeholders and to obtain a stable environment in which the land, the living space and the rights of stakeholders are respected. It can be used to obtain a cartographic representation of the land-uses in a forestry concession. Micro-zoning allows the local communities and indigenous peoples to obtain a powerful tool in the negotiation of social clauses in harvesting contracts of forestry companies. The forestry company, on the other hand, obtains an overview of important elements to consider when drawing up a management plan for a concession, like for example the protection zones.

### The Pilot case in DRC

The pilot project was executed in the Mpole concession 026/03 of SODEFOR in DRC and covered the area of the concession, the various land-uses, and the various claims by communities. In this case 4 stakeholders were identified; the villages, indigenous peoples, the authorities and the concessionary SODEFOR, each with their own interests.



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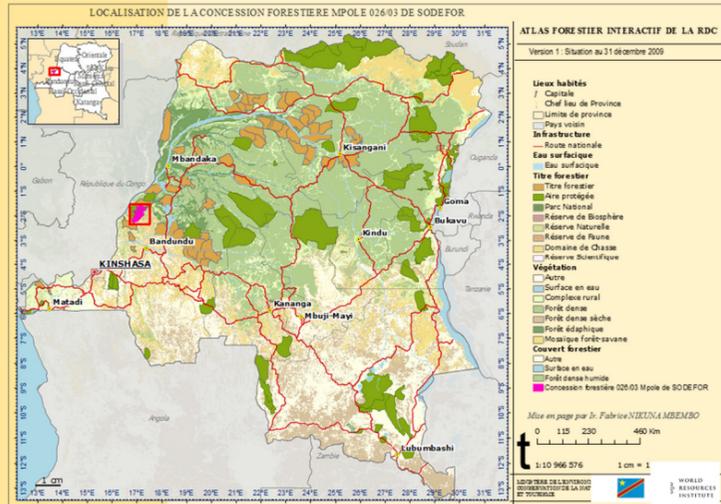


This leaflet was developed by Form international and WWF, as part of the Congo Basin Program. All leaflets can be downloaded from [www.forminternational.nl](http://www.forminternational.nl) or [www.idhsustainabletrade.com](http://www.idhsustainabletrade.com)

## The method in 10 steps

### 1. First visit to the site and identification of the stakeholders

It is indispensable to visit the site prior to the commencement of fieldwork to get a good impression of the environment and of the people to work with, before making a work plan. This way making unrealistic work plans is avoided.



To be successful all stakeholders that influence the acceptance of the final result of the work need to be involved. In the case of the DRC this means involving the authorities on a national, provincial and local level. Local NGO's are important sources of information but can also verify if the work progresses correctly and fairly. Other important resource persons need to be identified and contacted in order to ensure their cooperation. At the level of the local communities it is important to ensure they are well represented and to secure the cooperation of the traditional or customary authorities. Make sure all sections of the local community are represented (local people, indigenous people,

men, women, youth, elderly, different economic actors). Language can be a great barrier, so work needs to be conducted in local languages. The languages need to be known before the work starts so that so that people that know the language and the local situation can be added to the team.

### 2. Preparing the material needed

- Large sheets of Paper (A0) and markers in various colours.
- GPS receivers are needed for the field verification as well as GIS software to work with the data collected.
- Base maps, as recent as possible and satellite images of the zone.
- If possible "Tablet" computers with GPS receiver and GIS software containing the maps/satellite images are really useful for "real time" verifications in the field and to help the discussions.
- Where there is no mobile phone signal, satellite phones or radio systems are important to ensure contact with other teams.

### 3. Information and sensitization of the stakeholders

As cartography is quite an abstract activity, but having important consequences, making sure everybody is on the same page is very important. This requires proper sensitization and training of the participants before starting the mapping. One of the uses for the mapping exercise is for instance the calculation of benefits resulting from the social clauses of a logging or mining contract.



The mappers need to realize that some (indigenous) populations have different ways of expressing themselves when outsiders or neighbours (with whom they may have clientelistic relationships) are present. Sessions may need to be separate for each group.

To get viable information it is essential that all participants understand the basic notions of mapping and that work is done in a way all can understand. It can be helpful to decide together on the symbols to be used as legend in the mapping of houses, fields, forest, streams, borders, sacred places, private terrain, etc.

### 4. Making the sketches of village land-use

After basic training (how to draw a map, use of symbols and colours) the work on the village map is done in a group (this work can also be done with delegated representatives). It is important to put emphasis also on future extension of activities (gathering, hunting, agriculture, timber harvesting), and to include elements like sacred sites.

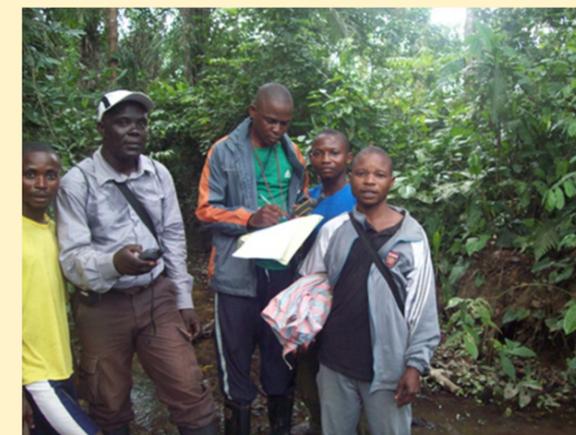
After the sketch is made it is presented to the interested people in the village so the views of all stakeholders can be gathered and errors discussed and corrected.



### 5. Training of mappers and collection of data with GPS

People put forward by the communities are trained on the use of a GPS. People to be selected for this training should be capable of reading and writing and should have basic knowledge of mapping and geography and should be fit to work in the field.

During half a day these "mappers" receive a practical training on taking and marking points on the GPS, as well as the capturing of tracks. After the training their skill level is tested.



### 6. Gathering information in the field

The terrain is walked and georeferenced by the local mappers accompanied by guides (usually hunters having intimate knowledge of the terrain). They record all features presented on the sketches. This work may take several days. Satellite reception by the GPS may be a problem in close canopies. If this happens a reference point where reception is possible is taken and the distance and angle to the point meant to be taken is recorded.

Collected data are transferred from the GPS to the GIS system on the computer to confirm conformity to the sketch made. This needs to be done before leaving the village, so differences can still be discussed.

### 7. Verification with other communities

To ensure that boundaries between village lands are correctly represented, these are presented in joint meetings between villages. Presentation can be done by village representatives. Possible conflict zones are identified and can be visited to find the border acceptable to all. The goal