

**PARTICIPATORY CARTOGRAPHY IN BENIN**

**Involving citizens in demarcating their communities, a case study from Benin**

**Felix Braeckman**

Projet d'appui à la gestion Foncière Locale (PFL)

VNG International, Benin

Felix.Braeckman@vng.nl

**Paper prepared for presentation at the  
“2017 WORLD BANK CONFERENCE ON LAND AND POVERTY”  
The World Bank - Washington DC, March 20-24, 2017**

*Copyright 2017 by author(s). All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.*

## **Abstract**

As in many parts of Africa, land rights in Benin are largely undocumented, resulting in land related conflicts accounting for 60% of court cases. In order to fast-track the modernisation of the country's legal and institutional framework initiated under the in 2013 introduced Land Code (*Code Foncier et Domanial*), citizens in two municipalities were asked to draw out the borders of their own villages. The result of this experiment: an inclusive and inexpensive tool for the demarcation of villages, municipalities or departments, called *Participatory Cartography*.

This methodology of Participatory Cartography has been developed in the framework of an ongoing experimental project in the municipalities of Dogbo and Klouékanmè funded by the Netherlands Royal Embassy in Benin and implemented by a consortium led by VNG International. The process of Participatory Cartography does not rely on the capabilities of state of the art innovations or newly developed technologies, but it falls back on simple and available methods underpinned by the believe that communities are fully aware of their own demarcations. Moreover, the methodology could offer solutions for internal border disputes. The Participatory Cartography tool can be beneficial to other actors involved in demarcation and registration of land, both in Benin and elsewhere.

**Key Words:** Benin, Demarcation and Registration of Land, Integrated Land Management, (Municipal) Land Administration, Participatory Cartography.

## **Participatory Cartography in Benin**

### **Involving citizens in demarcating their communities, a case study from Benin**

*"The operation to demarcate the borders of villages is crucial for us, since without that knowledge we cannot move forward. Boundary conflicts between municipalities and within municipalities are plentiful within Benin. Durable solutions cannot be found without the engagement of the local communities and without taking into account the history of the people associated with these lands. We need to start at grassroots level."*

*The Mayor of the municipality of Dogbo*

Funded by the Netherlands Royal Embassy in Benin, and implemented by VNG International (the International Cooperation Agency of the Netherlands Association of Municipalities), the PFL project aspires to experiment with Benin's new Land Code (2013) at the municipal level in two municipalities. Even though villages are not an official administrative unit within Benin, the Land Code marks out a pivotal role for the villages in its framework for land registration. Constrained by the fact that most of Benin's villages have never been demarcated, the project's management experimented with a participatory approach which allowed citizens to draw out the borders of their own villages. The result of this experiment: an inclusive and inexpensive tool for the demarcation of villages, municipalities or departments, which VNG International branded as Participatory Cartography.

The demarcation of administrative units in Benin is a sensitive and complex operation the Government is struggling to cope with, even though it is required by several laws and regulations. All the initiatives taken to achieve this have failed or were not successful for political, historical and sociological reasons. The most determining factors continue to be to take into account the perceptions of local people as well as the sociological balance underlying traditional societies.

Participatory mapping and mutual recognition of natural and physical landmarks on boundaries between neighbouring villages are the key components of Participatory Cartography. Essential to the operations' success is not only the involvement of all villagers within the operation, but also the inclusion of neighbouring villages. This is further complimented by the empowerment and participation of members from the Village Councils, land management bodies, the Municipal Council and civil society institutions.

### **Village Demarcation: A precondition for establishing the Cadastral Operations in Benin**

In accordance with the in 2013 established Private and State-owned Land Code (CFD), rural citizens can obtain a land ownership certificate (CPF) through land registration operations at village level

(containing both mapping as ownership information), called “Plans Foncier Rural” (PFR) or rural land plans.

Within the framework of the PFL project, the Beninese municipalities of Dogbo and Klouékanmè are taking up the challenge of experimenting with the new Land Code through the implementation of PFRs in respectively 18 and 16 villages. The Land Code stipulates that "*The PFR consists of a graphic document that represents the entirety of a village territory's land plots.*" Moreover, the code prescribes that "*topographic and land surveys shall cover the entire village territory and are required to take into account public and private State property as well as local authorities and their dependent territories.*" Both municipalities must therefore comply with the relevant legal provisions and in particular those relating to the "*coverage of the entire village territory*". If they fail to act in accordance with these stipulations, the cadastral authorities may refuse to issue land ownership certificates.

The analysis of the current cartographic library at the National Geographical Institute (IGN), the National Remote Sensing Center (CENATEL) and in the municipalities shows that there is no existing mapping of villages' administrative and territorial boundaries. The question is therefore how municipalities will fulfil this requirement of "*covering the entire village territory*" in the absence of any law establishing the such village boundaries.

Faced with this situation, both municipalities initiated the operation for "*participatory recognition of the natural and physical boundary landmarks of selected villages*", or *Participatory Cartography*. The process of Participatory Cartography does not rely on state of the art innovations or newly developed technologies, but falls back on simple and available methods underpinned by the believe that communities are fully aware of their own demarcations. However, this participatory and small-scale operation has no administrative or legal validity as internal boundaries have to be ratified by central state institutions. Nevertheless, it is a quick and inexpensive tool for the geographical demarcation of villages. On the basis of the experiences in Benin other actors involved in land registration equally faced with the absence of existing records, both in Benin and abroad, can and should be inspired to apply this methodology.

The methodology of Participative Cartography consists of four (04) steps. The figure below (figure 1) provides a schematic overview of what these steps entail. The application of these steps in the case of Benin is further elaborated on in the following text.

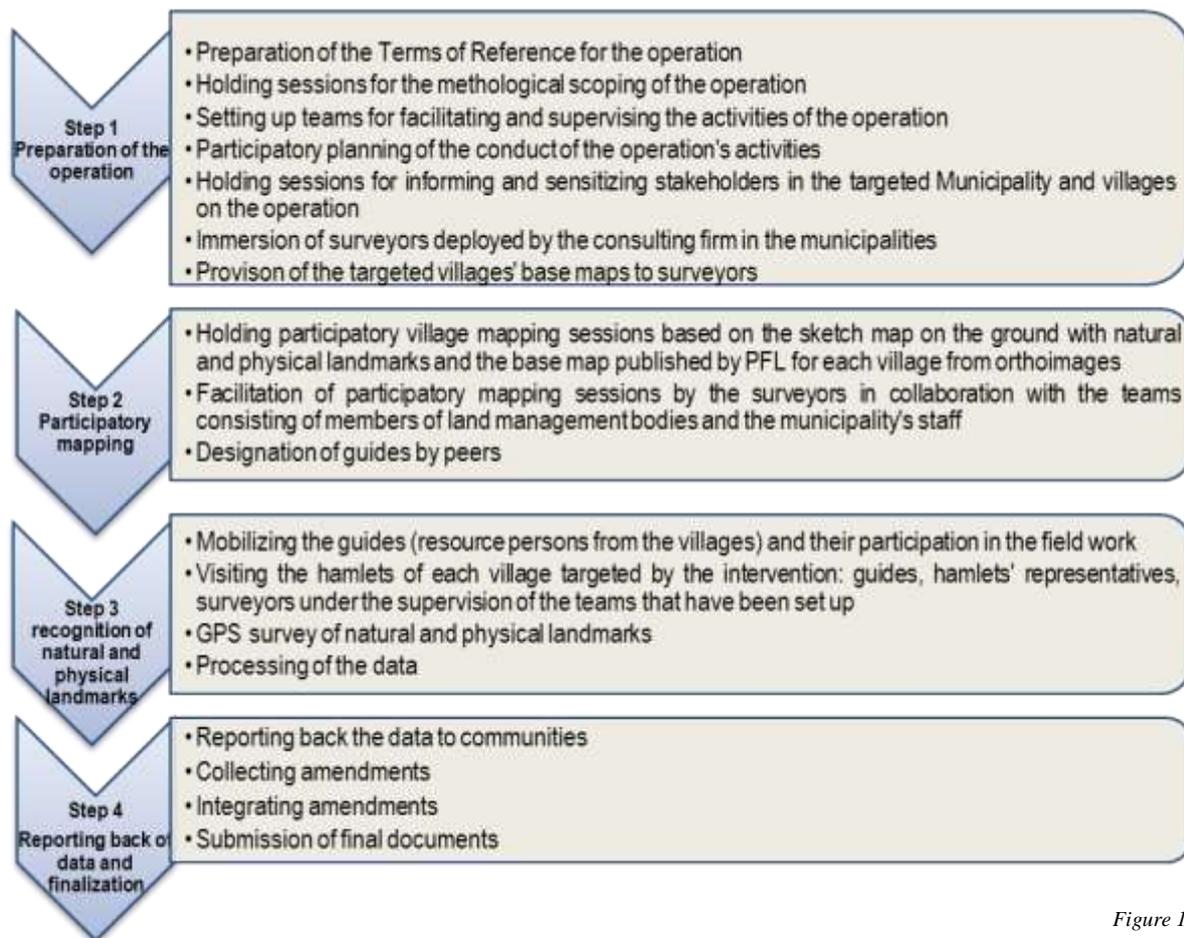


Figure 1

### Asking communities to set their boundaries

The process of Participatory Cartography starts with participatory sessions to discuss geographical and physical landmarks which serve as an indication of the village boundaries. The landmarks consists of trees, streams, roads and many other points of interest in the villages' surrounding landscape. Besides local villagers, the sessions brought together traditional land owners, elders, the village chief and councillors and guides with good knowledge of the village(s) as well as representatives of neighbouring villages. Land surveyors facilitated and chaired the sessions. An initial rough mapping of the village was the final result of these sessions. Discussions were often centred around maps provided by the National Geographical Institute or simply by sketching in the sand.

Besides a first indication of village boundaries, the sessions also marked the names of the numerous hamlets dotted across the Beninese countryside. Though many had already been identified in a distant past, Benin's population growth meant that some hamlets had grown to become villages in their own right.

In the village of Dogbo-Ahomey in the municipality of Dogbo, a woman said during the discussions that *"the job does not need politics, we need to do the right thing, otherwise, it won't work."*

The session concluded with the election of village representatives that were to accompany the land surveyors into the field. Equally accompanied by representatives from the neighbouring villages, the land surveyor thereafter went in the field to identify the landmarks that were marked during the participatory sessions. During this exercise the landmarks' geographical coordinates were consequently registered by the land surveyor.

*"Agbago and Akouébadja are neighbouring villages. Akouébadja is one of the villages targeted by the PFL project. Agbago village benefitted from a US-funded PFR operation in the past. Land plots acquired by the inhabitants of Agbago on Akouébadja's territory had been registered under the Agbago PFR. Following the Participatory Cartography activities, village councillors, village elders and representatives from both municipalities validated the identified boundaries of Akouébadja village, which included land plots initially registered under the Agbago PFR."*

Agbago SVGF

### **Validating the identified boundaries**

After the land surveyor's field work, some minor overlaps were noted between the boundaries of neighbouring villages. These overlaps were due to the fact that some of the representatives, once in the field, went beyond the boundaries identified during the first participatory sessions. Smaller-scaled meetings between councillors and village elders of all involved villages were held to discuss these overlaps. Municipal authorities were also present during these meetings, though did not take an active part in the discussions. Without exceptions all overlaps were resolved without conflict. It has to be noted though that reaching resolutions was eased by the fact that these boundaries as of yet carry no legal weight.

Once the participants agreed on the final boundaries, the surveyors went back into the field with the elected representatives to take these final comments into account and include in their reference maps. Once the participatory sessions and field work were finalised, validation meetings were organised to formally agree to the identified boundaries.

After validation three products are available :

- a reference map of each village with natural and physical landmarks;
- a summary table per village describing the location and the name of landmarks, major demarcations (the names of hamlets of each village concerned, neighbouring administrative units, i.e. place names, hamlets, villages or neighbourhoods, etc.), the registration of land border disputes/conflicts and other relevant comments;

- a reference map of each municipality with village boundaries.

### **Participation starts with solid preparation**

It is important to remark that the Participatory Cartography process is precluded by intense preparations to ensure both villagers and municipal officials are capable and motivated to complete the entire process. Through awareness raising and disseminating information on the role of villages within the Land Code, willingness to participate is created among municipal and village officials. In Benin, involving local governments in the preparation was not only needed to ensure commitment from authorities, but also a prerequisite: the Land Code prescribes that the operations must always be initiated by the Mayor and the whole municipal council, with support from village councils and the effective involvement of Communal Land Councils (CoGeF) and civil society representatives.

Thus, besides local governments, local community members have also been extensively involved in the preparation stage. First of all, this served the purpose to ensure citizens' trust and take away fear for persecution when voicing their views. Secondly, to inform and sensitize citizens on the implication and attributions of a modern land registration system. Some farmers who participated to preparatory sessions for example, initially were strongly opposed to the demarcations, as they believed that one could not own land in villages different from their own. During the preparation of the Participatory Cartography such misperceptions could be addressed and neutralised. The previous statement regarding the villages of Agbago and Akouégbadja provides a good example of that.

Ensuring both commitment, trust and correct information proved crucial to avoid escalations of new or existing land conflicts between communities. It should therefore be emphasized that the success of Participatory Cartography does not lie with the execution of the methodology, but as much with its preparation.

### **Participatory Cartography pays off!**

In the short time span of 3 months, May to July 2016, the experiment with Participatory Cartography managed to cover all the 34 villages included in the PFL project. This rapid roll-out of the operations can be attributed to the simplicity of the methodology, rather than the financial resources backing it, as at the end of the operations costs averaged around CFA 250 000,00 (around USD 400,00) per village. That means that the operations remain affordable, even when one has to deal with limited municipal budgets.

Participatory Cartography therefore offers Benin's developing land registration institutions an affordable, quick and simple methodology to demarcate its villages, a key constraint today within the existing land registration framework of the new land code. Municipalities can be in the driver seat and initiate these operations.

Beyond Benin, Participatory Cartography offers practitioners a tested tool to develop demarcations based on the human identities, rather than the straight lines of a ruler or opportunistic

strokes of gerrymandering plaguing many parts of the developing world. Additionally the approach could offer solutions for internal border disputes. Depending on the administrative breakdown of a country, a collection of villages accumulate to a municipality, groups of municipalities become departments, and departments are joined in provinces. A complete coverage of village demarcations could therefore peacefully and inexpensively settle domestic borders, based on community perceptions rather than political interests.

### **Background to the Projet d'appui à la gestion Foncière Locale (PFL)**

In 2013, Benin adopted its new Code on Private and State-owned Land (Code Foncier et Domanial - CFD). An important milestone within the domain of land governance. The Code prescribes a radical modernisation of Benin's land governance structure and institutions both on a local and a national level. This concerns amongst other the introduction of new institutions and mechanisms, that differ from the former practice, such as the installation of the Agence Nationale du Domaine et du Foncier (ANDF, the national cadastral institution). On a local level, the different actors involved have expressed their need for assistance in applying and complying with this new legal framework.

In this light, a consortium of VNG International and LID Management together with the municipalities of Dogbo and Klouékanmè, and the National Association of Municipalities in Benin (ANCB) funded by the Royal Netherlands Embassy in Benin have formulated a project in support of the application of the new Land Code (2015-2018, €4,9M). The principal objective of the Projet d'appui à la gestion Foncière Locale (PFL) is the implementation of the institutional framework and the provisions of the CFD for the purpose of integrated land management at the local level. The project will serve as a pilot to local actors to experiment with the application of the CFD and the institutionalisation of the framework as determined by the CFD before the law enters into force in 2018. The experimental design of the project allows it to explore different methodologies and share its experiences in anticipation of the nationwide implementation.

Hence, it is about supporting the setup of this new legal framework and capacity building of these (new) institutions in charge of land management, involving many stakeholders at local and national level that do not necessarily have similar interests. In addition, the project aims to contribute reflections and lessons learned to the national dialogue for possible improvements of the legal framework to promote sustainable land management at the local level. The ANCB plays a key role in this knowledge sharing. Furthermore, the target municipalities will be supported in the everyday use of the land management tools (PFR, RFU, allotment, etc.) to make it sustainable.

*Acknowledgment for the development of this paper goes out to the partners in this projects, notably the municipalities of Dogbo and Klouékanmè. A special thanks goes out to Hervé Dossoumou of the PFL team in Lokossa and Gerard Baltissen of the Royal Tropical Institute in the Netherlands (KIT).*