



### About This Guide

The **Community Land Value Chain (CaVaTeCo)** in Portuguese) is an approach that can improve tenure security and management of community lands and natural resources in the context of large-scale land investments. CaVaTeCo provides the conceptual base for the LEGEND Project, implemented by ORAM and Terra Firma in Mozambique's Districts of Namarroi and Ile in northern Zambézia province.

This project is part of **DFID's LEGEND Challenge Fund**. This Fund enables civil society agencies to test innovative approaches to land, and to show companies how they can implement practical approaches that secure community land rights and livelihoods *and* the sustainability of land-based business investment.

This LEGEND Project is pioneering the delimitation of family lands in Mozambique using the CaVaTeCo approach. This Guide is the first in a series that are intended to document technical aspects and lessons learned about the use of CaVaTeCo in practice. It explains the key steps in the process of land delimitation, in order to help field staff to correctly use the approach.

#### Nine steps in delimiting land parcels:

1. **Confirm the team's location in the community and on satellite maps**
2. **Open the form "Parcel Registration" and conduct the interview**
3. **Save coordinates of a central point**
4. **Identify the parcel boundaries**
5. **Fill in the receipt**
6. **Save, close and submit the form**
7. **Highlight boundaries on maps, scan and submit for digitalization**
8. **Digitalize and confirm parcels**
9. **Objections, Corrections and Confirmations**

## 1. Confirm your location in the community and on satellite maps



The technical team produces a set of maps based on 1:2,000 scale satellite imagery of the area. With community leaders, owners of land parcels and neighbours (women, youth and men), the field team use the A3 maps of these images to identify obvious features of the community, such as roads, rivers, schools, and clinics. After confirming the current location of the team, identify less obvious features, like paths, fields, trees, and buildings with thatching or metal roofing.

Next, identify the houses, fields and other features of the parcels where you will be working during the day. Finally, go to the first parcel and begin the interviews.

## 2. Open the ODK form “Parcel Registration” and conduct the interview



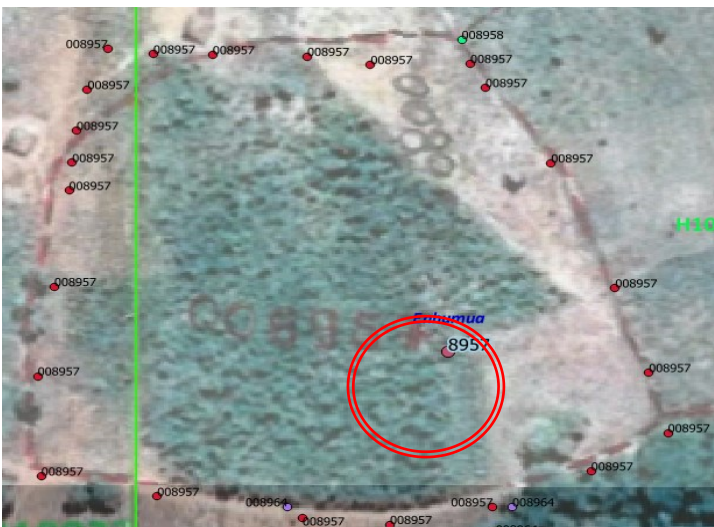
Confirm that the land holder, neighbours, witnesses and community leaders have their identification documents with them. Open the digital form “Parcel Registration” in the tablet and fill in:

1. Personal data of the land holder(s);
2. Information on the parcel and its acquisition;
3. Personal data of witnesses.

The form requests all information required by the national “Terra Segura” programme and the Land Information Management System (SIGIT).

A parcel includes land in a single contiguous piece that has been allocated to the ‘owner’ under customary law or based on 10 years of continuous use. This can include land for habitation, fields in use, fields under fallow, and forested areas.

## 3. Save coordinates of a central point



Save the coordinates of a central point inside the parcel. This is a place within the parcel that provides a reference point; it should be at least 10 meters inside the boundaries of the parcel. In the digital formula, this provides a link between the personal data of the land holder and all information related to the parcel.

The GPS device usually achieves accuracy of under 2 meters. This is sufficient for rural areas under the “Fit for Purpose” approach, which requires less precision for delimitation in most rural areas than is needed for very demarcation of high value urban land.

*The image at left shows the central point (in the red circle) and several coordinates on the boundary of parcel 8957.*

## 4. Identify the parcel boundaries



With the landholders, witnesses and community leaders, the team walks the boundaries of the parcel. A team normally has members with 3 clear roles. The first involves coordination of the participants, ensuring that all stay closely together, in order to confirm that they agree on the boundaries. A second involves working with the printed satellite images, using a pencil to draw a sketch map of the parcel boundary, based on the actual places walked. The third involves use of the tablet and GPS device to save coordinates along the way. From time to time the team and community members should physically mark key boundary points in an easily visible way.

## 5. Fill in the receipt for the parcel



After confirming the parcel boundaries, fill in the receipt and confirm details of the land holder and witnesses. This can be based on one of several possible identification documents (such as national identify card, driver's license, voter registration card, etc). The receipt number is used as the Unique Parcel Number.

Give the receipt to the land holder. This serves as confirmation that the parcel was delimited, and will be used in the process of Confirmations, Objections and Corrections. (This process will be explained in another CaVaTeCo Technical Guide.)

## 6. Save, close and submit the form

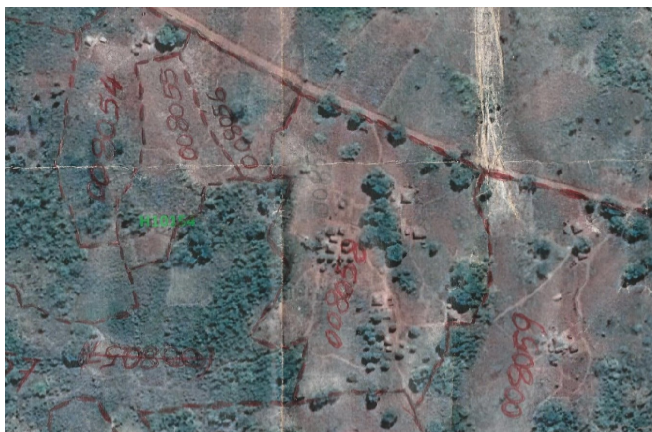


Take a photo of the signed receipt, then save the fully completed form. Confirm the accuracy of all the information, then close the form.

It is now possible to open a new form and repeat the process on a different parcel.

When there is access to the internet, submit the forms for all the parcels delimited during the day.

## 7. Highlight boundaries on the map, scan and submit for digitalization



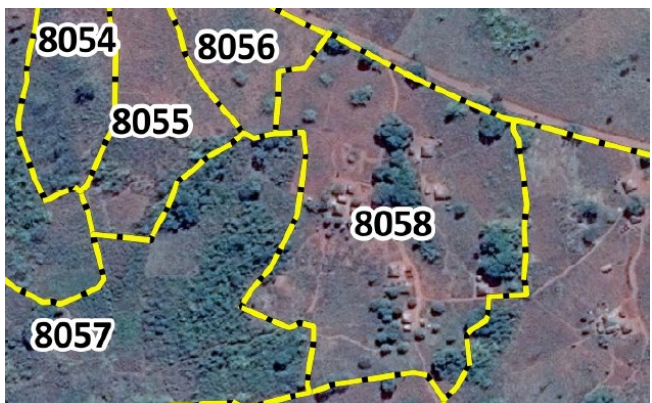
After returning to the office, prepare the final sketch maps. With a red pen, highlight the parcel number and re-draw all the parcel boundaries that were sketched using pencil on the printed versions of the satellite images. This makes the boundaries and the parcel number permanent and more visible on the printed maps. Then scan and send to the team doing digitization.

## 8. Digitalize and confirm the parcels



The digitalization team produces a digital map showing the overlap between the boundary lines drawn on the scanned maps, compared to the GPS coordinates saved in the form. There are often small differences between the sketch map and the actual coordinates. If there are large differences, something has gone wrong either in the sketch map or in the saving of GPS coordinates. In such cases, the situation is raised with the field team for correction.

## 9. Objections, Corrections and Confirmations



After all the parcels within a community are digitalized, the digitalization team produces a full map of the community, printed on one or more A1 posters, along with a list of details of the parcel owners. This is displayed in a well-advertised public location for 15 days, during which time anyone with an interest in the process can review and make objections or propose corrections. Once all input is received, details are used to produce Declarations of Land Rights, distributed by the association.

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**LEGEND**  
Land: Enhancing Governance  
for Economic Development



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Disclaimer: The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of DFID.

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