## Participatory Mapping

CAN BE USED FOR:

- ☐ Community mobilisation and ownership
- ☐ Strengthening community bargaining power
- ☐ Agreement and adoption of community maps and land management zones
- ☐ Political recognition of collective land rights
- ☐ Conflict prevention or resolution

## ▶ Overview

Participatory mapping allows communities or groups to identify, define and map the resources, natural and socio-cultural features, different land-uses, and boundaries of an area. This can range from mapping a village to the charting of Indigenous territories.

**"Participatory mapping generates live, editable, spatial information, but it must always be part of a wider advocacy process."**

**DAVE DE VERA
(PAFID, PHILIPPINES)**

Whilst the practical mapping process may utilise specific technologies in order to generate spatial data (such as handheld GPS devices, drones or satellite imagery), it is important to understand that participatory mapping is not merely a technical, passive or politically neutral process. The decisions about who is involved or excluded, what is mapped and especially what is not mapped, are inherently political, cultural and gender-sensitive decisions. For this reason, it is important to integrate participatory mapping as part of a broader capacity-building and advocacy strategy.

**"Mapping is a tool that works when integrated with wider approaches on legal empowerment."**

**CHRISTIAN JITAR TAKU
(COMAID, CAMEROON)**

**TOOL #1**

# Community-defined aims & consultation

**"Traditional knowledge is often not considered enough by government agencies: maps are a type of language through which to capture this knowledge in a way that can be used as evidence in legal processes."**

**IMAM HANAFI, JKPP-INDONESIA**

Participatory mapping processes need to engage with the wider context, meaning the needs, values, priorities and aspirations of the relevant community. Effective community facilitation and dialogue should be at the heart of all stages of the participatory mapping process, which should be informed by the principles of Free, Prior and Informed Consent (**FPIC**). This helps to ensure that communities themselves are central in defining the aims of any mapping process. These aims could include, amongst others:

☐ Gaining a better understanding of land and resources to inform improved management practices.

☐ Preventing or resolving conflicts between or within communities or with external entities such as plantation companies or governments.

☐ Gaining formal state recognition of rights to own, manage or use land and resources.

**"Participatory mapping is a strategy of empowerment and cultural replenishment. It provides a form of evidence to say 'we exist.'"**

**KRIS GUNUI (INSTITUT DAYAKOLOG, INDONESIA)**

# Clear problem definition

The specific methodologies and strategies chosen will depend on the context, aims and priorities of the community or communities in question. However, a basic framework can be used and adapted across different contexts. The first stage in any participatory mapping process should seek to clearly define the problem at hand and what the community would like to achieve. This then informs the advocacy goals, and defines the type of data or information needed to serve these goals. Decisions on these aspects should be reached through a culturally appropriate community consultation and consensus process, which again should adhere to FPIC principles. CSOs can play a role here by providing relevant information on possible pathways and tools, including their advantages and drawbacks, supporting vulnerable groups within communities to organise and participate, and facilitating collective dialogue, but the decisions must ultimately be taken by the community members themselves.

> **"We look at how we can come on board to assist. The community are the full owners. As CSOs we are here to facilitate."**
>
> HARRISON NNOKO (AJESH, CAMEROON)

# Joint work plan and training



If there is consensus on the need for participatory mapping, then the next step would be to agree on a process and work plan. This can include the methods for data collection based on the information and outputs required to achieve the community's goals, technical and physical capacities, and available budget.

Once a work plan is in place, training can begin, for example on how to use specific technologies such as GPS trackers for plotting data points, or operating drones for aerial surveys. The focus should be on building expertise in the community so that community members can collect data themselves now and in the future without needing outside support. Identifying key people in the community that can be fully trained, and can then in turn train others, is a particularly effective (known as the 'train the trainer' approach).

# Define advocacy outputs

Following the collection of mapping data, the next stage is to go about creating the relevant outputs. These can take many forms, from digital or paper maps, general reference or topographic maps, thematic or cadastral maps that include data on ownership, resources, economic value and socio-cultural information, as well as 3D physical models. The information generated should then be checked and verified by the community, and altered accordingly before moving forward.

The outputs that have been generated should feed into the wider advocacy strategy defined by the community's specific priorities. For example, cadastral maps could help communities, individuals or groups make a claim for legal ownership or management rights over plots of land. CSOs can play a role here by providing information on relevant legislation and legal processes, linking communities with public services, or utilising their networks and platforms to lobby public or company officials.

These claims have a greater chance of success if they are connected to processes that influential political actors have already endorsed. In Cameroon, for example, CSOs have driven a process of developing a national harmonised methodology[1], involving the Ministry of Economy, Planning and Regional Development as well as the Institute of Cartography. The output was an eight-step approach that can be adapted based on local contexts, and is now being tested in five of the country's agro-ecological regions[2].

In the Philippines, the Philippine Association for Intercultural Development (**PAFID**) identified that the lack of data on the economic value of community lands and resources weakens the position of communities in negotiations. In specific cases, mapping has been used to generate data on the value of standing crops, infrastructure or other resources. This has been used successfully in advocacy campaigns to demonstrate the economic damage that granting concession licenses to external companies would bring, or to negotiate for fair compensation.

1   Fomete, T., Acworth, J., Afana, A., Kankeu, S., Bonnemaijer, J, et al. (2019). Reframing local land use planning methods and tools in south-west Cameroon as a foundation for secure tenure, sustainable and equitable rural development, and REDD+. 2018 World Bank Conference on Land and Poverty: Land Governance in an Interconnected World. [Online]. Available at: https://core.ac.uk/download/pdf/265380547.pdf

2   Rainbow Environment Consult (2017). Synthetic and practical guide of the unified methodology of participatory mapping in Cameroon. Practical Guide. [Online]. Available at: https://view.publitas.com/the-tenure-facility/guide-to-the-unified-methodolgoy-for-participatory-mapping-in-cameroon/page/1

# Things to consider and anticipate

☐ **NEW CONFLICT.** The overview of a community's land and resources that participatory mapping generates can also create new conflicts or revive old tensions. For example, by exposing the previous sale of land without community consultation, or the existing unequal distribution of land. Being explicit about the benefits and drawbacks of participatory mapping and agreeing a conflict resolution process with the community from the start is very important so that communities can be clear about what they are getting into.

☐ **SKEPTICISM FROM OFFICIALS.** State officials or experts are often sceptical of community-generated maps and spatial data, and certain actors can oppose participatory mapping because they feel their power is threatened. Sensitising officials to the benefits that it can bring for them and their constituents, such as helping to fill gaps in government capacity, mitigating conflicts and demonstrating their progressiveness to win political support, is key to any advocacy strategy.

☐ **OFFICIAL STANDARDS.** Ensuring that outputs are of high quality is essential; at the very least they should meet the minimum criteria set by government mapping agencies so that they cannot be dismissed for procedural reasons without consideration. The official requirements should be researched and confirmed before starting a participatory mapping exercise so that the technical, process, budget and time implications can be understood, explained to the community and planned for.

☐ **FUNDS.** Funding and financial planning should not be overlooked. The costs of actualising and digitising maps can be a very real barrier to success. For example, purchasing satellite imagery for live mapping, purchase or hire of data collection equipment, as well as the costs of the data collection process itself (hours of work, supplies, foregone wages).

# Engendering Participatory Mapping

**Mapping Indigenous lands from the perspective of adat (Indigenous) women in order to build their capacity to participate in the wider adat rights movement.**

Whilst participatory mapping is intended to allow communities to define their priorities and strengthen their wider advocacy agenda, the process and outcomes may still reflect existing inequalities. Adat women often still find themselves excluded from decision-making and consultation processes within their own communities, let alone at local or regional government level. In the context of growing critique of the patriarchal nature of the Indigenous rights movement, Perempuan AMAN set out to mainstream women's perspectives and build their capacity to enter substantive discussions within this wider movement.

In four different regions across Indonesia (West Kalimantan, East Kalimantan, Flores and Maluku), they approached Indigenous women to understand their perspectives and priorities. It soon became clear that women did not necessarily identify with the concept of adat territories in their daily lives, so beginning by trying to map territories in a cartographic manner did not make sense. Instead, women were encouraged to describe land-use changes over the generations. This process allowed adat women to express and share their knowledge on management of these areas, such as particular farming methods, areas that should be protected and specific knowledge on an array of different plant species.

Through their narratives it became clear that adat women did not see overall territories or express ideas of ownership, but rather saw specific areas as spaces in which they could fulfil their social responsibilities. The concept of wilayah kelola perempuan (women-managed areas) came out of this, and women could then talk about why it was important to protect these areas. For the first time women were able to demonstrate the wealth of knowledge they had, building their individual and collective confidence and putting this into a frame that showed that their management decisions were forms of politics and self-governance.

Once this was established, sketch maps were created which further emphasised how women experienced their living spaces differently. Women focused on features such as houses and roads in the vicinity of their homes, whereas men tend to focus more on borders or physical landscape features. This recognition of differing priorities between men and women opened up space for dialogue within communities as well as amongst women themselves. Satellite images were printed and cut up into pieces, with communities asked to piece them back together. This served as an inclusive interactive tool that stimulated discussion on existing land-use and priorities for the future.

The concept of women-managed areas could also provide the frame for collection of data relevant to women. The location of priority areas for protection or conservation, for example, could be pinpointed. Quantitative data such as the number of women and their age groups were collected as part of a women-led census, as well as data on poverty levels as defined by adat women, which revolved around ease of access to land and food.

The mapping process provided women with a platform to engage in local decision-making spaces, and the data collected strengthened advocacy on national legislation.