8

Defending the land with maps

Derek Denniston

· Introduction

In January 1989, two boatloads of *pisteleros* (hired guns for a cattle rancher) came down from the headwaters of the Patuca River in eastern Honduras and pulled up on the shore of Krautara, a village of the Tawakha Sumu Indians. Armed with pistols and submachine guns, they unloaded their chain saws and sacks of food. They proclaimed legal title to all of the surrounding land, even though they carried no papers. For three months, they occupied the Indian village, forcing one family from its home and clearing at least 20 hectares of lush tropical rain forest for cattle pasture. The next year they returned to burn more forest just over the next hill. This was just one of the proliferating bands of cattle ranchers, loggers and landless peasant farmers that in recent years have been encroaching on Indian homelands that cling to the last remote forests, savannas, and wetlands of Central America.

European explorers of the western hemisphere labelled any lands unsettled by their kind as 'uninhabited'. Sadly, this colonial ignorance of indigenous peoples has persisted to modern times. The lands inhabited by Indians are usually considered vacant, and are still not recognised as theirs. Securing legal protection for their homelands is perhaps the most fundamental challenge indigenous peoples face in preserving their way of life - and preserving the ecosystems that are essential to it.

What threatens to make this problem far worse is the expected doubling of the Central American population to 60 million people within the next 25 years. With all arable land now inhabited, the only way for peasants to find new land to log, ranch or farm is to grab it from those not powerful enough to defend it. According to Mac Chapin of Native Lands, a programme that works to secure indigenous land rights: *"conflicts over land rights have become the most incendiary and deadly issue in Central America, and by far the biggest threat to the cultural survival of its indigenous peoples"*.

Two years ago, Indian leaders and cultural activists in the northeast corner of Honduras decided to remedy the political invisibility of the Indians of the Mosquitia region by carefully mapping where and how these Garífuna, Pesch, Miskito and Tawahka Sumu tribes lived. They put together a project[1] that would help the Indians create a detailed, graphic record of their homelands. While land use maps are not border police, they do establish who inhabits a piece of land and how it is being used, to prove that it is not empty and up for grabs.

This project was successfully replicated in the Darién region of Panama, home to the Emberá, Wounaan and Kuna tribes. Because the indigenous leadership in Panama was stronger, the second project was coordinated by an intertribal group of Indians together with the non-governmental organisation Centro de Estudios Acción Social Panameño (CEASPA), but followed the same methodology used in Honduras.

In both the Mosquitia and Darién regions, the rain forests, savannas, or wetlands are so impenetrable that the only access to

[1] The Honduran project was organised by MASTA, a Miskito Indian group, and MOPAWI (an acronym meaning *"development of the Mosquitia"*), a private Honduran development group that had worked closely with indigenous groups on land legalisation projects since 1987.

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

settlements is via river. The so-called rainy 'season' lasts most of the year, alternating with a few months of ticks and chiggers. The Indians are sparsely settled along the rivers. While most of the Indians in both regions have so far been largely spared violent confrontations with cattle ranchers, they can often see intruders at the edges of their territory.

· The mapping process

The mapping process included several workshops, land use surveys and finally a national-level forum to present the results. At the first workshops in Honduras and Panama, the project participants gathered to discuss the process. Peter Herlihy, a cultural geographer from the University of Kansas in Lawrence who had studied both regions extensively, served as the cartographic coordinator. He divided the landscape into zones that were of a manageable size for a single 'surveyor' to cover in a few weeks, typically a tract of a few hundred square kilometres. The Indian leaders selected indigenous surveyors for their intimate knowledge of the zone and their ability to speak and write Spanish. Coordinators then worked with them to develop survey questions about land use and to set procedures for administering the surveys and mapping the land-use areas.

Armed with large blank sheets of paper and the questionnaires, each surveyor set out through knee-deep mud to visit all the villages in his/her zone. In each village, the surveyor took a complete census of the population and asked families to describe where they farmed, hunted, fished, and gathered medicinal plants and materials for houses, canoes and crafts. Each village created its own symbols for the various land use activities, and together the villagers and surveyor drew, by hand, a detailed map showing where each of these activities took place, relative to the course of the rivers. Figure 1 shows an example of a map produced in this way. Land that looks like undifferentiated 'jungle' to outsiders proves to be supporting a wide range of sustainable practices by its inhabitants.

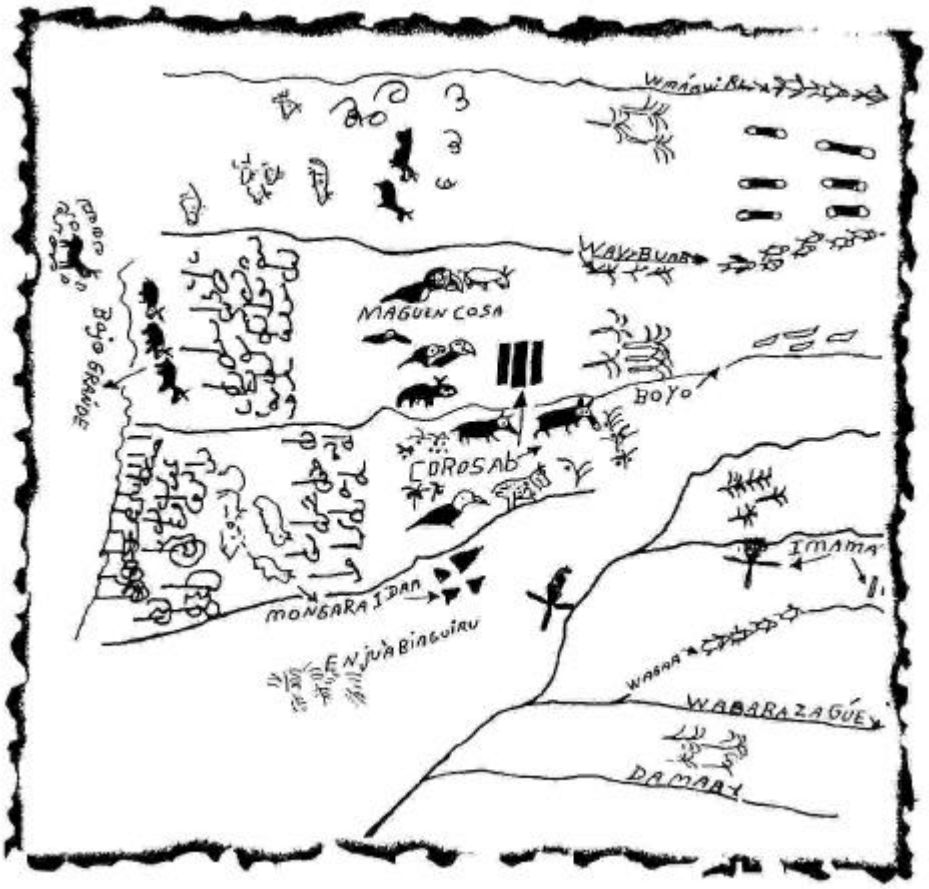
After gathering information from every family, the surveyors gathered for a second workshop with the team of cartographers to organise, clarify, and analyse the information. Making comparisons to aerial photographs and government maps, the team transferred the surveyors' findings to a new, composite 1-to-50,000 scale map. Then each surveyor returned to his/her community to check the accuracy of both the hand drawn and composite maps with the villagers.

In the process of comparing government maps and aerial reconnaissance photographs with the hand-drawn Indian maps, the cartographers found some surprises. Not only were the hand-drawn Indian maps often accurate in their proportions, but the existing government maps were just as often inaccurate. The mapping team found that the areas where the Indians lived coincided almost exactly with those in which the natural landscape had been preserved. Most important was that the Indians' maps provided the first genuine picture of where the Indians lived and how they used this land.

At a third workshop, the surveyors combined their maps under the supervision of Herlihy's team for a final revision of a single 1-to-250,000 scale map. This master map served as the basis for presentations at the concluding events, two-day conferences in the two countries' capital cities, Tegucigalpa and Panama City.

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

Figure 1. Portion copied from a hand-drawn land-use map made by an indigenous surveyor and villagers of the Marwa Sub-region, Panama



· Presenting the maps

These forums gave the indigenous groups their first opportunity to present their findings and opinions on land use and settlement patterns, the location of ecosystems, wildlife and threats to their way of life. Listening to the presentations were government ministers, other indigenous peoples, conservationists and local and international non-governmental groups. By centring the forums around the scientific maps and technical evaluations, the Indians had built a graphic and credible base from which to launch political campaigns on several issues, including legalising communal homelands, stemming the incursions of colonisation by settlers and development by multinational companies, and resolving the relationship between Indian homelands and national protected areas.

The meetings proved to be even more of a success than the participants had expected. Mostly as a result of MOPAWI's work, indigenous land rights are now taken seriously for the first time in Honduras by national politicians. In Panama, Kuna, Emberá and Wounaan had never collaborated on this scale. During an informal evaluation of the Panamanian congress afterwards, the regional chief of the collective Emberá-Wounaan territories, said, *"Last night, I could not sleep, my head was so full of all the beautiful things that I have seen during the forum."*

Other Indians at the meetings agreed. Two Miskito Indians from Nicaragua left so impressed that they asked the Indian coordinators of the Panama City meeting to assist them with a mapping effort of their own in December. According to Native Lands field coordinator Nicanor Gonzáles, persuading the Miskito to participate in the land use study and mapping process will be much easier with fellow indigenous peoples organising the project, since this will avoid the cultural

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

imposition often created by non-Indian anthropologists.

One of the Kuna coordinators for the Darién mapping, was unable to hold back tears in explaining what the project meant to him: *"It was an extraordinary experience, but as long as the rights of indigenous people go unrespected, there will be no peace in the country."*

While the Panamanian Minister for Government and Justice did surprise listeners at the Panama City forum with his public support for legal recognition of Indian homelands in Darién, the Indians still have good reason to sense trouble. The Panamanian and Colombian governments have been seeking international financing to build the final section of the Pan-American Highway between the two countries - and this highway will cut right through the homelands of the Emberá, Wounaan, and Kuna.

· Conclusion

Down the length of the Caribbean coast in Central America, other native tribes have begun to come together around the issue of land rights. In southern Belize, the Toledo Maya Cultural Council has been lobbying to establish a Mayan homeland. In Nicaragua, the Miskito are setting up a protected area on the Atlantic coast that would ensure their control over the wealth of natural resources in the region. In Costa Rica, the Bribri and Cabécar peoples are forming 'councils of elders' to take a leadership role in the La Amistad Biosphere Reserve near Talamanca. Since it is impossible for conservationists to make informed decisions about which rain forests to save until they know who lives there and how they are using the forest, mapping efforts are the logical first step.

Cartographers from both the Honduran and Panamanian National Institutes of Geography who collaborated in the mapping process stated that the Indian map of the Mosquitia was superior to any maps they could have done. It was not until the Honduran map had been produced that conservationists recognised the scientific value of the Indian maps; only then were project staff able to obtain funding for the Panamanian project from several sources, including the Inter-American Foundation, Wildlife Conservation Society, The Nature Conservancy, Worldwide Fund for Nature, and World Resources Institute.

Mapping indigenous homelands debunks the colonialist myth that these lands are uninhabited and degraded: the areas of remaining forest, savanna and wetland almost perfectly overlap with Indian territories. The political momentum created by the process raised the regional awareness of the Indians, showing them the common ground they shared with other indigenous peoples and empowering them to pursue the legal protection they deserve to their homelands.

· Additional comments

Andrew Leake, project officer for MOPAWI and coordinator of the mapping process in Honduras, has added some comments about the process based on his personal experience:

> *Working with people, particularly in a cross-cultural context, is not always easy. One must not underestimate the socio-political reality within which these projects were carried out. NGO staff had to relate simultaneously to the idiosyncrasies of several different ethnic groups, Indian organisations, local and national government office, the press and so on, whilst remembering at all times to abide by the financial accounting requirements of the donor agencies. Beyond the fact that mapping lands is a politically sensitive issue, the complex logistics, poor communications and relatively large amounts of cash involved in these projects frequently led to situations of political discord, suspicion, racism, inter-institutional jealousy and financial scandals. Each case had to be resolved so as to ensure the successful completion of the project, a task which often fell onto NGO staff and project coordinators.*
>
> *The very fact that these projects required and depended on the cooperation of many different people and organisations is in itself one of the key aspects of this work. The resolution of these conflicts does, I believe, result in greater personal and institutional maturity. And if, as I believe,*

Source: PLA Notes (1995), Issue 22, pp.36–40, IIED London

the success of these projects was the result of individual dedication from all involved, it underlines the fact that development and conservation are about people and how we manage interpersonal relationships. These experiences have shown us a unique method through which to achieve this. An important fact, because at the end of the day it will be people, and not maps, which defend the land.

- **Derek Denniston**, Worldwatch Institute, 1776 Massachusetts Ave., NW, Washington DC 20036-1904, USA.

ACKNOWLEDGEMENTS

This article is slightly adapted from one originally published in *World Watch* (Jan/Feb 1994). It is reproduced here with the kind permission of the Worldwatch Institute, Washington DC. Copyright 1994.

The article benefits of additional comments by Andrew Leake, project officer for MOPAWI at the time of the mapping exercises.