

# **Philippine Case Study**

## **Mapping with Communities in the Philippines: Rolling with the punches**

Paper presented at the 2005 Mapping for Change Conference  
KCCT, Nairobi, Kenya  
September 7-10, 2005

**By. Dave De Vera**

Philippine Association For Intercultural Development

### **Introduction**

The Philippines has a total land area of 30 Million Hectares. Half of the country is hilly and mostly categorized as a Forest Zone and part of the Public Domain. As of the year 2005, the country has a population of 85 Million. There are 112 ethnolinguistic groups in the country who comprise nearly 15% of the total population of the country.

The Philippines is slowly losing its forest cover and has to cope with an influx of mining activities in the uplands.<sup>1</sup> Furthermore, demand for land and natural resources continue to rise with the unabated migration of lowland families into the mountains. Thus there exists a very volatile mix of stakeholders who are in a very strict competition for the limited resources of the uplands.

A vast majority of the 12 Million population of Indigenous Peoples in the Philippines reside in the uplands which they claim as part of their traditional territories. Most of the remaining natural resources in the country are found within the traditional lands of the Indigenous Peoples

### **Community Mapping In the Philippines**

Community mapping in the Philippines has had a long and productive history in

the in the promotion of social justice, development and equity. Initial practitioners came from the ranks of Community organizers who introduced sketch mapping of villages and its resources in the conduct of their initial "Social Investigation" of their partner communities. The standard practice of conducting sketch mapping exercises in villages laid the foundation for the eventual use of mapping as a tool for participatory resource appraisal and for securing land rights and access to resources.

Community mapping practitioners in the Philippines utilize a wide array of methodologies/technologies in providing services to their partner communities. Results of an inventory of mapping resources and technologies among NGOs/Pos in the Philippines conducted prior to the conduct of the 1<sup>st</sup> Community Mapping Conference in the Philippines in 2000<sup>2</sup>, show that these range from sketch maps to define village boundaries, P3D-models which are used to generate information for Ancestral Domain Management Planning and high-end and cutting edge technologies such as Geographic Information Systems (GIS) and Global Positioning Systems (GPS)

In the mid '90s Indigenous Peoples advocate groups ventured into the use of

---

<sup>1</sup> The promotion of mining has been identified as a priority activity by the Phil. Government in its Medium Term Development Plan

---

<sup>2</sup> "National Conference on Community Mapping and Resource Management Planning" organized by the Philippine Association For Intercultural Dev't., 10/00, held at IIRR in Silang, Cavite

Global Positioning System (GPS) to help identify boundary corners of traditional territories. This was mainly in response to the opportunity created by the Issuance of Department Administrative Order No. 02 (DAO# 02) in 1992 which provided a legal process for the recognition of Ancestral Domains/Lands. DAO# 02 enabled the participation of Civil Society in the actual delineation of traditional territories. In the initial stages of the implementation of the DAO# 02, both Government and NGOs were taken aback by the staggering extent of traditional lands that needed to be mapped. There was an urgent need to adopt new technologies and methodologies as existing surveying technologies would no longer suffice. Furthermore, resistance against DAO# 02 was strong, thus the need for more precise technology that could accomplish more in less time.

The adoption of this new technology allowed the NGOs and IP communities to greatly accelerate the delineation of traditional lands/territories. Furthermore, with the GPS, the practice of mapping become simpler and easier to understand which was a big departure from its former status as a elite discipline reserved only for “licensed” engineers and practitioners.

### **Policy Environment**

In the early '80s to the mid '90s, Community Mapping practitioners enjoyed a fairly open and supportive policy environment in the Philippines. The Government agencies tasked to conduct mapping services for resource management and land tenure had exhibited a fair sense of inclusivity in the conduct of mapping activities and had a high sense of recognition of the skills of NGOs and the relevance of Community Mapping. DAO# 02 for instance established multi-sectoral task forces such as the Provincial Task Force on Ancestral Domain (PSTFAD) which took the lead in defining all the mapping directions and priorities. Community members along with their NGO support

groups played a very vital if not the lead role in these task forces. Participation in the mapping activities were not limited to the planning stage but included the deputization of community-claimants and NGO-partners in the actual conduct of the on-ground mapping and delineation of traditional territories.

In the 1997, the Indigenous Peoples Rights Act (IPRA) was enacted. The new law established the rights of IP communities to file claims and secure a Title over their Ancestral lands/domains.<sup>3</sup> The IPRA also institutionalized the “lead” role of the community by adopting the principle of “Self Delineation” in the conduct of all mapping and survey of traditional lands and territories. Under this principle, all surveys will only be done with the approval of the community where they shall initiate the survey, identify the boundary corners, validate the survey results and approve of the final survey plan. Apart from their role in defining the perimeter of their lands, IPRA also recognized and legitimized their right to define, identify and establish traditional land-uses and the disposition of their ancestral lands through the accomplishment of their own Ancestral Domain Sustainable Development and Protection Plans (ADSDPP).

This ideal situation would soon be challenged by the enactment of new law, REPUBLIC ACT NO. 8560 or the Philippine Geodetic Engineering Act of 1998. RA 8560 is significant because it sought to regulate the practice of all mapping activities in the Philippines. Under the law, the practice of Geodetic Engineering is defined as follows:

“The practice of Geodetic Engineering is a professional and organized act of gathering physical data on the surface of the earth with the use of precision instruments. It is also the scientific and methodical processing of these data and

---

<sup>3</sup> Chapter \_\_\_\_, IPRA

presenting them on graphs, plans, maps, charts or documents.”<sup>4</sup>

The law also included the following activities its coverage: “... the use of surveying and mapping equipment such as graduated rods, measuring tapes, transits, levels, theodolites, fathometers/echosounders, electronic distance meters, global positioning systems, stereoplotters and all other instruments that are used to determine metes and bounds of lands positions of points on the surface of the earth...”<sup>5</sup>

Furthermore, “ Land surveys to determine their metes and bounds and prepare the plans thereof for titling and for other purposes”<sup>6</sup> was also regulated. Additionally, “the preparation of Geographic/Land Information System”<sup>7</sup> was also exclusively within the domain of the law.

Upon its enactment, RA 8560 effectively limited all of the gains that community mapping practitioners had secured through the more progressive policies that were previously enforced. The coverage of the law included the most basic as well as the advanced mapping methodologies and technologies which were being utilized by community mapping practitioners in the Philippines. More importantly, because of the new law, the conduct of community mapping activities had been criminalized and can now be penalized.

### **Measures undertaken to enable recognition and participation**

Faced with the threat of penal sanctions and the loss of community participation in mapping, the response from the NGOs and POs took various forms and were done in different stages.

---

<sup>4</sup> Article II, Section 2, Letter a., Republic Act 8560

<sup>5</sup> Article II, Section 2, Letter a., No. 1, Republic Act 8560

<sup>6</sup> Article II, Section 2, Letter a., No. 3, Republic Act 8560

<sup>7</sup> Article II, Section 2, Letter a., No. 10, Republic Act 8560

At the onset, the NCIP was required to promulgate the implementing rules and regulations of the survey and mapping of traditional lands. The process called for consultations and participation from stakeholders. This process was used by NGOs and POs to engage the new Government Office to share its methodologies and field experiences. It was also an opportunity to formally introduce institutional capacities and resources that can be shared with the Government. An important feature of these engagements was the ability of NGOs and POs to personally interact with the NCIP and its personnel gain their confidence and gauge the possibilities of future collaboration.

The limited resources of the Philippine Government restricted its capacity to implement IPRA. The strong clamor of the Indigenous Peoples for the full implementation of the law which had been delayed for nearly four years provided a window for participation. During the phase when the National Commission on Indigenous Peoples (NCIP), the Government agency tasked to implement the IPRA was still in the process of developing its capacity and establishing its systems. The NGOs and POs already possessed advanced skills and tested methodologies which were already field tested. Thus, Government had no option but to partner with Civil Society. The community mapping practitioners among the NGOs and POs were the only viable option for the NCIP at that crucial period.

To remedy the situation, the NCIP entered into several Memoranda of Agreements in order to accomplish the delineation of several claims of ancestral domains which had been pending for some time. These MOAs provided the legal cover to the NGOs/POs to safely continue and undertake their mapping activities. The standard MOA between the Government and its NGO/PO partner stipulated that the surveying and mapping activity was to be “officially” led by the NCIP, but at the same time

ensured the full participation of the NGO and PO in the actual conduct, review and validation of the survey results.

These partnership agreements with Government have proven to be mutually advantageous to both parties. The NCIP gets to accomplish its targets and get the credit, while the NGO and PO ensure community participation and the use of tested methodologies while being legally recognized.

Another arena where NGOs and POs were able to gain legitimacy of an established community mapping methodology was in the preparation of local land-use plans. Participatory 3D-mapping (P3DM) has been practiced in the Philippines since the mid '90s by NGOs and POs as an improved alternative mapping method which allows greater participation in community spatial planning. P3DM has proven to be a very simple yet effective methodology for ordinary communities to use in resource management planning, boundary conflict resolution and a range of other applications.

In recognition of its affectivity, P3DM was officially recommended by the Department of Environment and Natural Resources (DENR) through DENR Memorandum Circular 2001-01 as a viable strategy in protected area planning and natural resource management. This official recognition along with the continuous refinement and advocacy of the methodology by NGOs and POs has allowed P3DM to increase its acceptability and stature as a mapping methodology. As an illustration no less than the Office of the President of the Philippines through its Office of the Presidential Adviser on the Peace Process (OPAPP) entered into a partnership with the Philippine Association For Intercultural Development (PAFID) to work with several IP communities in northern Philippines to construct 3D models of their communities which were later used as tools to resolve the boundary conflicts which had resulted into protracted and

often violent tribal wars. Many local Government Units have since engaged the assistance of NGOs and POs in the construction of P3DMs which had been used as planning tools in the establishment of resource management plans.

Local Governments in the Philippines play a very crucial role in defining the land use policies of the country. Each local Government is mandated to promulgate their own Municipal Land-use plan. The conduct of such a plan is regulated by a national Government Agency that provides clear rules of planning which includes the proper legal format for a Land-use Map. Unfortunately, many local Governments do not have the wherewithal to conduct a land-use planning exercise much less make their own land-use maps. More often that not, they fall prey to unscrupulous pseudo-consultants who merely cut-and-paste old maps and present these as accurate representation of the municipalities coverage.

This presented another opportunity which has provided NGOs and POs an chance to partner with Government continue with their work and secure recognition. The use of P3DM has been recognized by Local Government Units as very cost-effective, technically efficient and it also provides the local Government a chance to rally the people over a common cause. In the past 3 years, five Local Governments have officially partnered with the PAFID for the conduct of P3DM for their Municipality.

Aside from the low cost, a key factor that has convinced the Local Governments to adopt P3DM is the adherence to the "map format" as stipulated by the National Government. PAFID for instance has adapted the color scheme as provided by the guidelines of the National Regulatory Board. The P3DM being a very flexible tool and medium easily accommodated all the legal requirements as requested by the Local Governments.

## Impact

Results from the initial partnership with the DENR were very dramatic. In less than 5 years, nearly 700,000.00 hectares of traditional lands had been mapped and surveyed. Most of these areas were later issued Certificate of Ancestral Domain Claims (CADC). In the process, a sizable number of community volunteers were trained in basic map making, reading and in many instances GPS instrumentation.

Signs of empowerment were very evident in communities who were producing their territorial maps in partnership with NGOs and POs. Communities now had the basic skills to read and make a map and thus were no longer dependent to outsiders and to unscrupulous personalities. Furthermore, with the knowledge they had, community members were able to substantially participate and strictly monitor the conduct of the mapping activity of their land.

With the NCIP, the Partnership Agreements of the PAFID yielded two titles including the 1<sup>st</sup> Ancestral Waters Claim and nearly 100,000 hectares of traditional land mapped and surveyed. Very recently, the NCIP promulgated its Administrative Order on the conduct of Ancestral Domain Management Planning where, P3DM was recommended as a viable tool that can be used by communities to facilitate data generation for community planning.

Data generated from the P3DMs constructed by communities have been very instrumental in providing the people with accurate and up to date information. Moreover, the information generated by the people has enabled them to negotiate with much more confidence and conviction. Most communities now use data from the P3DM to negotiate with their local Governments for possible collaborative management of environmentally critical areas within their territories.

## Challenges

RA 8560 continues to pose a threat to the practice of participatory mapping by practitioners. It acts as a proverbial sword of Damocles that hangs above ready to pounce once the political winds change. Many communities see mapping as a right (and rightfully so) and do not see the need for partnership agreements in order to practice it and derive its benefits. In the absence of legal partnership agreements with Government, community mapping practitioners run the risk of being legally challenged and convicted. In the ever-changing political landscape of the Philippines, policy changes have been made whenever the state has felt challenged by civil society. Tolerance for participatory community mapping is contingent on a highly political landscape.

Recent developments in mapping methodologies and technologies has made mapping simpler and more easily accessible to ordinary people. Gone are the days when a community had to wait for weeks for the arrival of an Engineer to pinpoint the proper location of a boundary corner. It can be said that in the Philippines, the advances in mapping has slowly trickled down into the local communities who are now beginning to once more take control and own the mapping process. Due to the efforts of community mapping practitioners, some communities now produce their own maps and understand and interpret maps the same way as a licensed Engineer would be able to do.

However, the main challenge to the legitimacy and institutionalization of participatory community mapping lies on the powerful vested interest who are threatened with empowered communities. Professional lobbies scared of losing an exclusive domain continue to discredit the technical efficiency of community maps. Commercial lobbies engaged in large-scale natural resource exploitation are troubled by the questions raised by

communities through their maps. Local politicians who zealously guard their political territories continue demand that Traditional boundaries conform with their jurisdictions political boundaries.

This behavior is not totally surprising as it has been shown before that the status quo will react once critical spatial information becomes available and understandable to ordinary people. An empowered community will always be challenged.

### **Conclusion**

Community mapping has been a very powerful tool for change in the Philippines. It has enabled communities to file claims, secure titles, empowered people to advocate their demands and development priorities. Community mapping has enabled communities to gain access and even generate critical spatial information. However, this has seriously challenged the status quo.

The state restrictions to the practice of mapping as established by law is an illustration of such a reaction. To enable participation and overcome the restrictions of law, partnership agreements with Government can be explored and utilized by civil society. Recognition from the Philippine Government can only be secured if the NGO/PO can exhibit a clear track record and a high proficiency and skill level. Furthermore, NGOs/POs must be able to accept the reality that in these agreements, the Government shall be “in control” and take the lead.

However, it must be made clear that these remain to be stop-gap measures which can be rescinded and are still contingent to the over-all political landscape. The main objective should be to secure a Government policy that shall harness the collective traditional spatial knowledge and skills of communities in order to ensure the applicability and relevance of spatial data and the policies and plans that shall emanate from it.