SUPPORT FOR THE SUSTAINABLE DEVELOPMENT OF THE INTERIOR -COLLECTIVE RIGHTS

PARTICIPATORY MAPPING IN LANDS OF INDIGENOUS PEOPLES AND MAROONS IN SURINAME

FINAL SUMMARY REPORT
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THE AMAZON CONSERVATION TEAM

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LIST OF ABBREVIATIONS

ACT	Amazon Conservation Team Suriname
CBL	Central Bureau Aerial mapping
CI	Conservation International
GIS	Global Information System
GLIS	Geographical Land Information Systems in Suriname
GPS	Global Positioning System
CLIM	Commission Land Rights Indigenous Peoples Lower Marowijne
GOS	Government of Suriname
IACHR	Inter-American Court of Human Rights
IDB	Inter-American Development Bank
NGO	Non-Governmental Organizations
NTFP	Non Timber Forest Products
PAS	Pater Albrinck Stichting
SSDI	Support for the Sustainable Development of the Interior
FPP	Forest Peoples Programme
LEO	Local Earth Observation
GBMF	Gordon and Betty Moore Foundation
OAS	Organization of American States
WWF	World Wildlife Fund

Executive Summary

The participatory mapping process has been proven effective in documenting the presence and use of communities in a given territory, and more importantly improving communication between communities and their Government. In this similar line of thinking, the Government of Suriname has initiated a community mapping process with the communities living in the hinterland. The community mapping process was initiated by SSDI and ACT was hired in December 2008 to train and guide communities and process GIS information into maps.

The methodology used for community mapping consisted of six consecutive steps: 1) initial contact with the communities, 2) compilation of GIS base maps, 3) Training of community mapping teams, 4) Gathering of map data in the field through community workshops and field expeditions, 5) Transfer and cleaning of map data and 6) Verification of data and format of the map. ACT logistics team worked together with designated community persons to organize community workshops, field expeditions in dug out boats and transportation of fuel, food and field supplies.

The major challenges in conducting the community mapping exercise was that the communities were under the impression that the area would be demarcated instead of mapped. As a result ACT encountered some resistance of the tribes which was cleared after intervention of SSDI. The methodology was attuned to the cultural needs of each community. As a result, some communities – *Saramaka* and *Kwinti* - chose not to have community workshops due to several reasons such inter tribal conflicts and small amount of tribal members, respectively.

The training of community members was highly dependent on the amount of members the tribal leadership put forward. In some communities, for instance the *Ndyuka* tribe, the tribal leadership dedicated the secretary of the *granman* to take the lead, while others would assign two or more members to be trained. Gathering of data occurred through community meetings and actual field expeditions in canoes on the rivers and walks on the land. Some tribes – *Paramaka* and *Ndyuka*- inserted more information from community meetings than from the actual field expedition, but the choice was a matter of community preference.

The mapping process was interrupted for several months with the extreme droughts of El Niño in mid 2009 and administrative difficulties. Also, the *Saramaka* community participation was disturbed by the VSG standpoint that they did not agree with the mapping methodology, similar to the viewpoint of the VIDS. This was resolved after several months of explaining in large and small krutus (meetings). The *Kaliña* and *Lokono* groups that operate under the VIDS have not participated in the process while inhabiting relatively small areas in the coast.

Old conflicts between tribes were discussed during the mapping process. The SSDI/ACT team decided to mark those areas as disputed on the maps. Each of the conflicts in East Suriname– involving the *Paramaka, Wayana, Aluku and Ndyuka* tribes were discussed and each community agreed to mark them as disputed. To assess these disputes, tribal leaders needed to be consulted cross-border into French Guyana *(Aluku).*

After the information was processed into a map by ACT, the maps have been verified numerous times by the communities to ensure the correct spelling, pictures, logos, borders and other design aspects. In total more than 250 community members participated in the mapping process. The individual maps of the *Ndyuka, Saramaka, Aluku, Matawai, Kwinti* and *Paramaka* are compiled into a larger map that also consist of maps created by the communities of the *Trio, Wayana, Ndyuka* at the Cottica River and *Saramaka* at the Gran and Pikin Rio River. The other maps made by the VIDS and VSG were unavailable to the project.

1. Introduction

Access to lands and having their own institutions to manage these lands are prerequisites for the proliferation of healthy, culturally vibrant, and resilient Indigenous populations[1]. Vice versa, examples from countries around the world show that loss of Indigenous peoples' lands is a main driver of the extinction of Indigenous cultures, including their ancient land management institutions. While increased integration into national societies is a major cause leading to the loss of Indigenous lands, acculturation processes also have made Indigenous peoples better informed and more vocal in their struggle for retaining rights to land and self-determination. Parallel to these processes, Indigenous peoples have become better organized and better connected to international support mechanisms, such as human rights lawyers and international courts, in seeking protection of their rights.

The Government of Suriname (GOS), with the support of the Inter-American Development Bank (IDB) and the Japan Special Fund (JSF), is undertaking the commitment articulated in the Government Declaration of 2006-2011 to improve the administration and development of the Interior. The GOS has recently embarked on a comprehensive approach for the planning and eventual implementation of a sustainable development program for the Interior named "Sustainable Development for the Interior" (SU-T1026). This approach includes a strong participatory methodology that ensures that the target beneficiaries are involved in the planning and implementation of their own development priorities and that the focus of the program is aligned around their rights and interests.

The participatory mapping component of the larger work "Support for the Sustainable Development of the Interior" focuses on the undertaking of a land-use mapping exercise with the maroon and indigenous communities. Although land use maps have already been developed by a small number of Indigenous and Maroon communities with the support of various non-governmental organizations and the GOS's Central Bureau of Cartography, the maps will be used for compiling a comprehensive map of tribal land use for Suriname. This comprehensive map will identify the overlaps between communities, as well as disputed areas with legally instated lands of the Government for protection of biodiversity.

This report explains the process for initiating and executing the community mapping process in each community. For the purpose of the Collective Rights component, the report functions as an activity report, explaining the different undertakings in the field for community mapping. For the purpose of this report, consultations have been held with the authorities of the Maroons tribes – Ndyuka, Kwinti, Matawai, Saramaka, Paramaka, Aluku – and the indigenous tribes – Trio and Wayana. However, the Kaliña and Lokono tribes did not participate in the project and their views have not been considered in this report.

[1] Indigenous peoples are also known as natives, aboriginals, first nations, and other names.

Participatory Mapping

Mapping indigenous cultural landscapes provides a way to considerably improve both the understanding and the management of the natural resources on which these groups depend. During the 1970's, Latin America's development strategies for the Amazon generally promoted the exclusion and even removal, of its traditional inhabitants, and viewed this region as being unoccupied territory replete with resources just waiting to be appropriated and utilized (Almeida 2002, cited in Martins and Ataide 2004). Presently, many official government maps rely on aerial photographs and satellite imagery to gain information, and for establishing political boundaries. All too often maps imply that certain areas are completely uninhabited. Even if some settlements do appear on maps based on photographs or satellite images, they do not convey the full extent of traditional indigenous territory and/or patterns of land-use. This lack of information provides an incentive to "develop" these territories. Furthermore, this information is only understood in the symbols and language of modern map-makers. Disregarding the indigenous knowledge and history of the land excludes tradition indigenous communities from an important political and development process.

One of the basic functions of mapping traditional indigenous landscapes is simply demonstrating the presence of traditional cultures, and their ancestral ties to the land. The maps that ACT has helped produce display accurately geo-referenced indigenous settlements, and other sites of cultural significance such as hunting grounds, habitats of useful plants and animals, and sacred sites. These sites are referred to in the traditional indigenous language. Providing a map that redefines the territory from an indigenous cultural perspective creates a space for the interests of indigenous groups to enter into national development plans, and for dialogue that is respectful of the rights and histories of indigenous cultures.

ACT's community based approach to mapmaking, known as Participatory-GIS mapping (Alcorn 2000) has often been termed "countermapping" to emphasize how maps have historically been used by dominant European cultures to deny the rights of local indigenous populations by omitting their claims and making their land appear available for appropriation (Poole 1995, Walker and Peters 2001). Although documenting the presence of traditional indigenous cultures through maps does not in and of itself guarantee that their legal rights and land tenure will always be respected. By taking the necessary steps to ensure their legitimacy as a legal document, these maps help keep government accountable for its actions. In order to accomplish this, the appropriate government agencies are engaged as partners in the process. This process strengthens the map of an indigenous community in several ways. First, the process of working with government agencies can open or improve on communication with indigenous communities. Second, by working with government agencies during the mapping process it increases the likelihood that the maps will actually be used to assess the risks of future development projects slated to affect traditional cultural groups. ACT has a 10 year collaboration with the Government office responsible for mapmaking Finally, by establishing communication with government officials it creates an opportunity for community needs and concerns to factor into national development schemes since the process places community members in contact with government officials.

Participatory GIS maps can also be helpful tools for resolving current conflicts and to prevent new conflicts from developing. As mentioned before, traditional mapping methodologies that only represent human settlements as dots on a map in relation to geographic features, altitude, and political boundaries, can also be inadequate because the process can fail to account for the presence of forest-dwelling indigenous tribes, and of the presence of more recent stakeholders such as peasants, river-dwellers, fishermen, and rubber-tappers, to which the Amazon has also become a place of importance (Martins and Ataide 2004). During the participatory GIS mapping process extensive research is conducted on the general social situation of the area before the actual mapping begins. This etnoecological survey is to gain an accurate picture of the social landscape so as to better understand the needs of all the local stakeholders of the area, and how their activities and relationships affect one another (Martins and Ataide 2004). For example, it would be useful to know how other non-indigenous parties use indigenous territory, which is especially important to understand when considering issues associated with land tenure and border enforcement. The mapping process is useful for addressing current and unpublicized land related conflicts since it can reveal, for example, the encroachment of non-indigenous parties onto previously unaffected areas of indigenous territory by members of the national population, or by illegal industry. As a legal document, cultural maps can serve to halt illegal or unsanctioned activities on indigenous territory. Maps can help prevent future land related conflicts if they are consulted and used during national planning processes, and used in risk assessments of proposed development initiatives.

Finally, one of the hidden benefits of participatory GIS mapping is its effect on community cohesion, communication, and empowerment. ACT's participatory approach to cultural mapping necessarily involves community members to not just supply the information for the map such as names and geographical locations of specific areas of importance, but to design many features of the map, namely, the legend, title, and logos. Since the map is ultimately generated and owned by the community it can lead to a sense of empowerment, and be a culturally reaffirming since community members must discuss and agree upon the names and locations of places of significant cultural value (Crawhall 2003).

An additional result of the process of ethno-mapping is the identification of the priority areas for conservation. After the identification and mapping processes of crucial places, it is possible to concentrate efforts that allow for the sustainable management and the protection of those areas. Although participatory GIS mapping will not be the lone solution to the complex problems facing the preservation of the Amazon and its traditional inhabitants, it can be an indispensable component in fostering intercultural communication, asserting indigenous rights and land tenure, addressing and preventing many future land and resource based conflicts, and to inform national development strategies. ACT has long held that conservation of biodiversity is inextricably linked with the future of its indigenous peoples. Therefore, using the power of maps to defend indigenous territory makes use of a historically effective tactic long used to appropriate and redefine traditional indigenous territory.

2. Methodology

This Chapter provides an overview of the methodology used for the mapping exercise with the communities. The methodology used for the project, given the time frame and budget made available by the Client, was based on the process described in the "Methodologia de Mapeamento Cultural Collaborativo[2], developed by ACT. The chapter starts with the preparatory activities undertaken with the communities. This section is followed by the technical preparation for implementing a community mapping exercise. The chapter concludes with the Global Information System (GIS) process to complete the map for future use by the Government for granting collective rights to communities and management purposes.

1. Initial Contact with Communities

Indigenous and Maroon tribes live along the main rivers that flow in north-south direction of Suriname. These rivers house numerous villages, each defined as a community that belong to an overarching tribe. The coordination of activities was based on ACT's detailed work plan approved in February 2009. Each community was contacted by the Clients' communication team and was explained the mapping exercise for land use. The introduction of the ACT team in each community and the mobilization of community members was the Client's responsibility. Consequently, the ACT mapping team – consisting of minimal three peoples- contacted village leaders to arrange for the logistics for travelling the rivers and marking points of interest.

The ACT team, consisting of a mapping trainer and experienced mapping assistants, travelled to the site and arranged a community meeting with the traditional authorities from either a single village or clusters of villages. This meeting envisaged discussing the design and execution of the community mapping process. Each mapping process was attuned to the community character and preferences; for instance some villages preferred to have GPS trained-people travelling the rivers alone, while others preferred to have all traditional leaders travelling along with the GPS trained community members. The specific details of each mapping process are explained in chapter 2.

In tribes facing border disputes an additional effort was made to discuss the mapmaking in the transboundary region. The land use expert and anthropologist held meetings with traditional authorities to discuss how to depict land-use information on the map. Also, the issue was further discussed in the village meeting when the mapping team arrived in the village for the actual mapping.

[2] See page 25 of the Technical Proposal Collective Rights

Challenges: However, when the ACT team entered the villages, the communities were under the impression that the area would be demarcated. The link between demarcation[3] and community land-use mapping[4] was not clear to the communities. The misconception caused a significant delay to start the mapping activities. The ACT team needed to arrange a full community meeting(s) to explain the purpose of the land-use mapping exercise instead of discussing the actual activities the communities need to be engaged in. Also, in one instance, the traditional authority was not present in the village despite previous appointments with the Client and ACT. ACT left the village of the *Matawai* tribe and postponed the mapping exercise until a later date (for details see chapter 2).

2. Compilation of Base Maps

The Geographic Land Information System in Suriname (GLIS) cannot provide a base map of the country area of Suriname. Therefore, the ACT team needs to draw a digital base map from scratch from the aerial pictures from the national cartographic database of the Central Bureau of Aerial Cartography (CBL). Using ARCGIS 9.1.3, the mapping team compiled the base map for the tribal communities of the *Ndyuka, Saramaka, Aluku, Paramaka, Matawai* and *Kwinti* tribes, as required by the Terms of Reference. These maps are used to insert land-use information gathered by the communities.

In addition, the ACT team prepared large-format photographs for each of the territory of the different tribes using Google Earth Pro. These photographs were used as discussion tool for the tribes in community workshops.

3. Training of Community Mapping Teams

In a community mapping process, the community makes the ultimate decision on how many people to train and which people to train (local authorities or other community members). Only then the community will have ownership over the process. From each community, 1-4 persons were assigned for marking the points of interest. These persons are trained in a 1-2 day workshops that provides a theoretical explanation and an opportunity to obtain practical skills. The trained mappers receive a mapping manual including the GPS-user instructions in the lingua franca *Sranang Tongo* as a reference (Annex 1). The training was executed by both an academic level trainer and experienced community mappers from other villages in the Suriname interior. The trainers practiced with the newly trained community mappers for marking houses, water taps and other points in the village.

[3] Demarcation is a legal process that defines an owner, user rights based on a claim for land.
[4] Community Land use mapping is a process of expression of the community perception of land use into a comprehensive map.

Challenges: Not all tribes chose to train people from their communities, because of 1) Trust issues between different groups within the tribe. For instance, the *Ndyuka* tribe assigned only one person to mark and document points of interest. 2) Tribes were not well informed about the content of the mapping exercise, 3) Non-participation of the VIDS and the VSG. Although the Client arranged several meetings with the *Saramaka* in the interior, the withdrawal of the VSG reflected negatively on the participation of certain villages in the *Saramaka* area. For more details see the description of the Saramaka mapping process in Chapter 2, and 4) trust issues with outside (non-ACT) organizations. For instance, the *Paramaka* tribe was not open to new projects to be initiated because of previous failures and unkept promises.

4. Gathering of Map Data in the Field

The gathering of map data in the field occurred through two processes: community workshops and field expeditions.

Community workshop

Community workshops support the data gathered with GPS technology from the field. Whenever communities were comfortable doing the exercise the ACT team was prepared to conduct a full community workshop. In preparation, the base maps were prepared. The community received transparent stickers with legends, representing activities such as hunting, fishing, agriculture, cultural important places, forestry and mining, or color pencils, so individual members could mark points on the map (Annex 2). The details of each tribal response to community workshop are given in section 2.

Challenges: The community workshops are a helpful tool to make people discuss and deliberate about the use of the territory and to reach consensus. Unfortunately, two out of six tribes choose not to have a community workshop. The first tribe is the *Kwinti*. The *Kwinti* small amount of tribal members (approximately 500) and their limited use of space enabled using solely GPS data. The second tribe is the *Saramaka*. *Saramaka* chose to decline the community workshop due to the division within the tribe resulting from the execution of the *Saramaka* verdict under the IACHR court decision[5].

Field expedition

The next step for the community is to map actual points on the land and rivers. The community mappers visit into the territory after receiving the GPS training. The mappers worked with the designated resource persons (usually elders and knowledgeable members of the tribe) and travelled along rivers to mark points of interest. Two persons would use a GPS to take waypoints while one person would make notes in the reference data logbook.

The ACT team worked collaboratively with the community mappers to make sure that data was inserted correctly into the GPS. This is the first level of quality control. When the

[5] See Land Rights, Tenure and Use of Indigenous Peoples and Maroons in Suriname, ACT, 2009

community mastered the GPS work, the ACT team moved to other locations. After 1-2 weeks the ACT team evaluates the data gathering with the community. This is the second level of quality control.

5. Transfer and Cleaning of Map Data

In this step, the ACT team downloads the data from the GPS to verify the accuracy. This data is analyzed in a Microsoft Excel data sheets and cross-referenced with the data logbook for potential errors. The data tables are then verified for duplicity, name-taking and assignment of legends. Consequently, the data tables are imported into the ARCGIS program. In case there were points in close proximity that may become overlapping points on the map due to scale, clusters were made. For instance, in some villages clustering of huts, hunting, and agricultural areas was needed to make the map readable.

6. Design and Format of Community Map

The points of interest are depicted on the map and provided with legends. Each legend is stored into layers into the digital map. The map is then provided with a border, text and legends. This map is designated as a "draft map". The function of a "draft map" is to verify the legends, the placement of the points of interests, names etc. Therefore, the "draft map" map lacks geo-reference information - orientation, coordinates, projection -, because the map needs to be as clean to make adjustments with color pens. The "draft map" is duplicated and disseminated according to the needs of the communities. The "draft maps" are the basis for verification, which consists of two separate phases as discussed below.

Verification process

In this phase the draft map is presented to the communities in a community workshop(s). The map is discussed with the community to reach consensus on the information depicted. The community uses colored markers to make notes on the map, according to a guidelines provided in a specifically designed manual (Annex 3). The community provides the title of the map, as well as pictures and borders for the layout of the map. The Client provided the correct names and spelling of all information on the maps.

Format map

After the verification process has been completed the maps were finalized, meaning that geographic information, title, community logo, border, picture, legends and names are formatted onto the map. The maps are then designated as a "final draft" and can be printed for distribution. The designation "final draft" is because community mapping is and fluid process and maps are subject to continuous change. Each map is owned by the community and the Ministry of Regional Development. The decision of map ownership was made by the Ministry of Regional Development in December 2009. ACT was requested to put the correct

wording for ownership on the map. Each map duplication needs prior informed consent before distribution and use by others, according to the international regulations (UN Convention of Biological Diversity, UN declaration on Indigenous Peoples, all signed by Suriname).

Challenges: Because community mapping is linked to a political process of acquiring land rights, the communities used the verification process to insert new information on the map. For instance, the *Paramaka* and *Ndyuka*, inserted large amounts of new information into the map, even though they have been in charge of taking points of interest in the territory.

3. Community Mapping Process in the Interior of Suriname

This Chapter provides an overview of the proceedings of the community mapping exercise. The chapter starts with an overview of the Suriname interior and the characteristics of the inhabitants living in it. The chapter is followed by a detailed description of the mapping activities for each tribe. This section is concluded by an explanation of the challenges faced by the ACT team to execute the work according to the Terms of Reference of the Collective Rights project.

3.1 The Interior of Suriname and its Tribal Communities

The Republic of Suriname (land mass: 163,820 km^2) is located on the Northern tip of South America North of Brazil between Guyana and the French Department of *La Guyane* (also called French Guyana). Suriname has border disputes with French Guyana (area between the Litani River and the Lawa River) and with Guyana (area between the two main head waters of the Corantijn River and marine territory).

Fig. 3.1 Suriname in Latin America

Suriname's proximity to the equator (2-6° N; 54-58° W) makes for year-round tropical temperatures. Daytime temperatures in Paramaribo range between 23 and 31°C, with an annual average temperature of 27°. The range in average temperatures between the warmest months, September/October, and the coldest, January/February, is only 2°C. The main seasonal variation is between the dry and the rainy seasons (December-January and May-August). Rainfall is highest in the central and southeastern parts of the country and averages 2200 mm/yr. The relative humidity is high, ranging from 70 to 90%.

Suriname's coastal zone is characterized by mud flats that are formed by currents in the Atlantic Ocean that carry silt from Amazon rivers. The typical vegetation in the coastal and riparian zones consists of woodland and mangrove forest on sandy beaches. Further land-inward one finds savanna, swamps, and lowland coastal forest. Far in the South of Suriname there is another savanna area called the Sipaliwini Savanna. The remaining, southern 80 percent of the country is covered with dense tropical rainforest with numerous mountain ranges and complex river systems.

Suriname supports a rich diversity of flora and fauna. Over 5.800 species of mosses, ferns and seeds plants are found in this country, of which an estimated 50% are endemic to the Guyana Shield region (Alonso & Mol, 2007). Suriname is also rich in vertebrate wildlife, including at least 185 mammal species, more than 700 bird species, 152 reptile species, 95 amphibian

species, 338 fresh water fish species and 452 marine fish species. Of this known species of vertebrates at least 3% are reported specific to Suriname. Many of the species found in this land, such as the harpy eagle, the giant armadillo or the jaguar are included in the IUNC list as threatened species and/or in the CITES appendix I of rare or endangered species.

Table 1 Suriname basic indicators

Land and natural resources	
Land area	163,820 km^2
Forest area in 2000 as a percent of total land area	86%
Protected areas (% of land area)	12 %
Population	
Population size (2005)	492.829
Population density (inhabitants/km2)	3.01
Annual population growth rate	1.37 %
% Indigenous Peoples (self definition at 7^{th} population census)	3.7
Economics	
National currency	Suriname dollar (1 USD ~ 2.75 SRD)
Per capita GNI, current US dollars	US$ 2230 (2004)
% People living below poverty line	64% (1999)
Main export products	Bauxite, shrimp
Minimum wage (not established by law)	300 SRD (110 US$)/month
Health	
Infant mortality (number deceased < 1yr. Per 1000 life born)	29.8 (2004)
Life expectancy at birth	69.5
HIV prevalence rate (% of population ages 15-49; 2003)	1.7 %
Human capital	
Literacy rate, adult total (% of people ages 15 and older)	89.6% (2004)
Unemployment (% of economically active age searching for work)	9.5%

Sources: ABS 2006; World Bank 2006, World Resources Institute 2006

Tribal Communities

With less than half a million people (492.829) and an average of 3 persons per square kilometer, Suriname is sparsely populated (Table 3.1)[6]. Approximately 85 percent of Surinamers live on the 30-km wide Atlantic coastal zone. The population is ethnically diverse, consisting of Hindustani (27.4%), Creoles (people of mixed African heritage, 17.7%), Javanese (14.6%), Maroons (tribal people of African descent, 14.7%), People of mixed descent (12.5%), Indigenous peoples (3.6 %), and smaller groups of Chinese, Lebanese, Whites, and others. The urban population (75.4% of total) lives in the coastal area, mostly in the capital city of Paramaribo.

Suriname's interior is inhabited by Indigenous peoples and Maroons. The two largest indigenous groups in South Suriname are the Trio and Wayana. In addition, several smaller tribes populate

[6] ABS 2005. Zevende Algemene Volks- en Woningtelling in Suriname. Landelijke Resultaten. Vol. I. Demografische en Sociale karakteristieken

South Suriname including the Akuryo, Apalai, and Waiwai. Members of these minority groups live in the larger villages dominated by Trio and Wayana. In addition to Indigenous Peoples, the interior houses six different groups of Maroons: Ndyuka, Saramaka, Aluku, Paramaka, Matawai, and Kwinti. They may number about 50 to 55 thousand people. Both the Indigenous Peoples and the Maroons claim that un-contacted forest peoples continue to live in the Southern Forests. Traces of and/or encounters with these un-contacted tribes are occasionally reported, though other people deny their existence. Since the 1960s, but particularly in the past two decades, others have come to work and live in the forested interior. These relatively new arrivals include Brazilian gold miners, Chinese store owners and loggers, foreign missionaries, nurses and teachers from the city, US Peace Corps workers, and development workers. An overview of the location of indigenous peoples and maroons is shown in figure 1.

Today approximately 8,000 Indigenous peoples and 54,000 Maroons live in Suriname (Table 1). Both coastal and interior tribal groups live a largely traditional life, depending on subsistence agriculture, hunting, and fishing. For cash income, they depend on informal extractive activities such as the collection of non-timer forest products (NTFP) , small-scale gold mining, and wildlife trade.

Table1. Estimated numbers of Indigenous and Maroon peoples living in tribal communities in Suriname[7]

Indigenous peoples	
Kaliña (Carib)	2,500
Lokono (Arowak)	3,500
Trio	1500
Wayana	500
Total	8,000

Maroons	
Ndyuka (Aukaners)	20,000
Saramaka	25,000
Paramaka	4,000
Matawai	3,000
Aluku (Boni)	1,500
Kwinti	500
Total	54,000

[7] *Sources: IDB 2004; ACT 2007a; ACT 2007b; CLIM 2006*

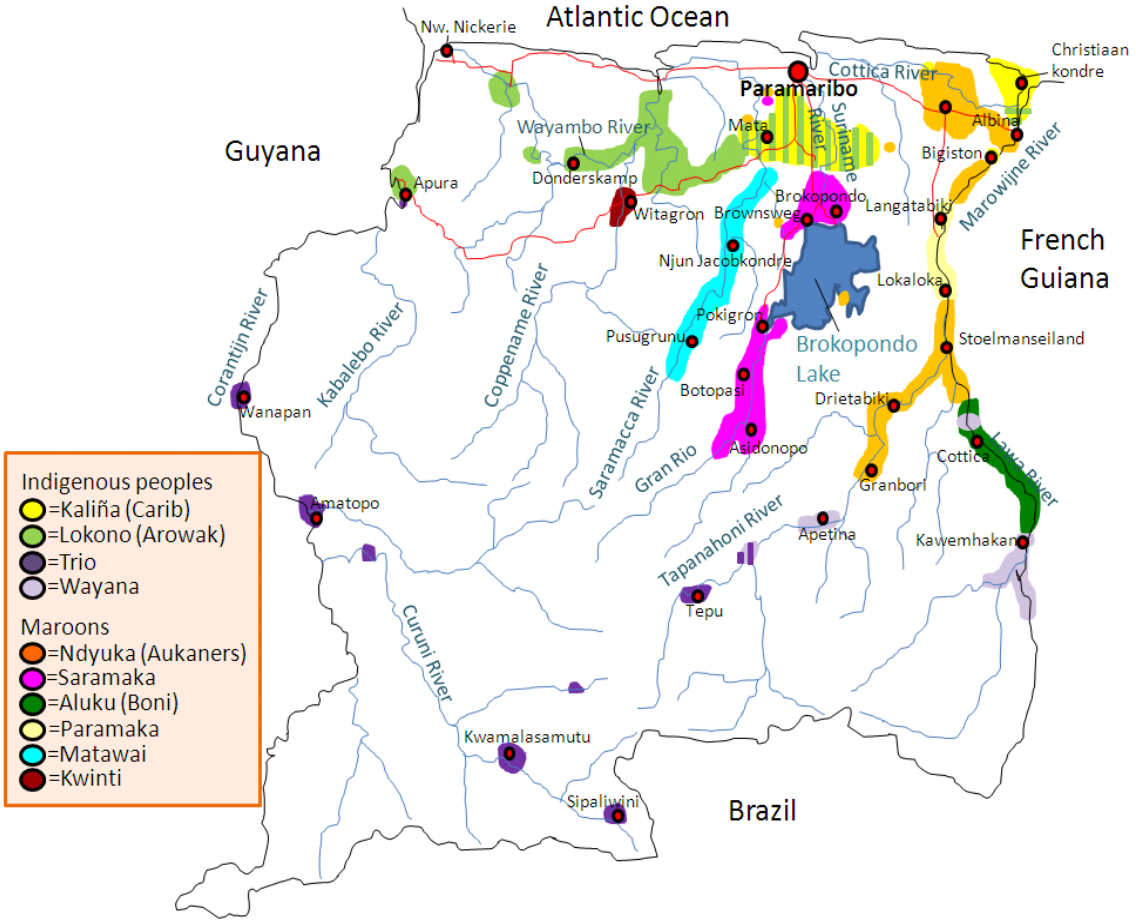

Figure 1: Tribal communities living within the territory of Suriname

3.2 Tribal Mapping Processes

This section provides an overview of the mapping process as was executed with each of the communities, including the approach to field mapping, the clustering of areas, and how unexpected problems were handled in the field to adhere to the projects objectives.

Land-use Mapping of the Ndyuka tribe

General pattern of land use

The *Ndyuka* tribe has villages, camps and people living along the Tapanahony-, Lawa- and the Marowijne River, between Albina and Pakira Kreek. Some smaller groups live along the Suriname River and near Sarakreek (in the Van Blommensteinmeer). The *Ndyuka* tribe near Sarakreek is officially placed under the jurisdiction of the *granman* of the *Saramaka* tribe.
Ndyuka villages are usually located on island in the main rivers, and consist of small houses near each other. No roads are present in these villages.

The creeks are used as fish- and hunting resources, transportation paths to agricultural grounds and sometimes for cultural proposes. The history of some of the villages can be traced back more than a century. The old 'faakatiki' is the main evidence of Ndyuka living in the interior.
The main income of the *Ndyuka* is from transportation in the North-South direction, (illegal) gold mining, selling of dugout boats, craft, agricultural products (*cassava*) and other non-timber forest products (*podosiri*). The *Ndyuka* is one of largest tribes living in the interior with approximately 20.000 members.

Approach to Field mapping

Before entering the field, the ACT team held a meeting with village authorities from *Ndyuka* villages along the Tapanahony River in December 2008. The meeting was conducted in the *Ndyuka* language and all questions were explained more in-depth by the secretary of the *granman*. The *Ndyuka* indicated that they are divided in three groups: the *opo- Ndyuka* (Tapanahony Puketi and up-river), the *bilo-Ndyuka* (downstream from Puketi on the Tapanahony river, and the *Cottica Ndyuka* (along the Cottica River in the coastal zone). These various groups have different customs and different land-use areas, which should be taken into account in the mapping process. The meeting started with an explanation on the purpose of mapping and demarcation in the context of land rights, and the roles of government, ACT, and people of the interior therein. ACT clarified that the meeting should be perceived as one initial step to become acquainted with the people and their perspectives, which will be followed up by other activities, including mapping.

The ACT team met separately with various *Ndyuka* leaders and resource persons to attune the mapping exercise to the communities' character and pace. Meetings were held with Jopie Matodya (Secretary of the *Granman*), *Districtsecretaris* Marinus Bee, Religious leader/shaman Ramon Awenkina and resource person Mr. Boerstam in Paramaribo and Albina. These persons

contributed in developing the route for the expedition which resulted in clusters of villages participating in the mapping exercise. Based on this information, the ACT team and local community clustered villages based on geographic location and logistical arrangements. Frans Adaba was hired to organize the logistics for the trip. The mapping exercise was set out in clusters of villages, as follows.

Area: Albina to Pakira Kreek

None of the *kapiteins* or *basia's* from Pakira Kondre and Mope Kondre was present at the time of the preparatory meeting of the Client at Bigiston. Therefore, no one in the area knew about the mapping exercise. The ACT team explained the purpose of the mapping exercise to the local authorities. The mapping team went with local informants under guidance of resource person Mr. Boerstam to collaboratively map the area. No people were trained in this region, because of the poor preparation to the exercise. Some of the names, locations of the camps, villages, and agriculture sites were given to local people during the field expedition from March, 9-12, 2009.

Area: Apoema Tapoe, Gaakaba, Puu Gudu

The ACT team discussed the mapping exercise with the villagers in Gaakaba in a community meeting. On request of the village elders, the border between the *Paramaka* and the *Ndyuka* was marked. Both the Paramaka and elders from *Ndyuka* tribes have no traditional burial ground nor *kapiteins* in the area between Moisanti and Puu Gudu. Because there are no *kapiteins* responsible for the area between the *Paramaka* and *Ndyuka*, the *Kapiteins* of Manlobi and surrounding area travelled to Gaakaba to discuss the border issue. These *Kapiteins* of Manlobi were selected by the *Granman* (through his Secretary).

The area between Loka Loka and Apoema Tapoe is mapped by assigned mappers by the *Granman*. The area between Puu Gudu and Kasitiki is mapped by the *Kapiteins* of Manlobi assigned by the *Granman*.

The village elders requested that three men participated in the mapping training. Therefore, three people were trained to use the Garmin Etrex GPS. The ACT team participated with the local mappers in the GPS exercise for marking the different creeks, camps, and land-use sites of interest between Apoema Sula and Puu Gudu from February, 9-12, 2009.

Area: Puu Gudu, Gonini Mofo, Dagu Ede

The ACT team discussed the mapping exercise with the villagers in Dagu Ede in a community meeting. During this meeting it was obvious that the villagers were not well informed about the mapping exercise, especially those between Puu Gudu and Dagu Ede. ACT decided to inform villagers with an announcement through the local radio station.

Three people were trained to use the Garmin Etrex GPS, including a 6th grade elementary school teacher of Gonini Mofo. The mappers choose not to map the area by themselves, so the ACT team assisted in mapping the Gonini Mofo Kreek. The ACT team participated with the local

mappers in the exercise for marking the different creeks, camps, and land-use sites of interest between Puu Gudu and Dagu Ede from February, 16-20, 2009.

Area: Drietabbetje, Godolo- Sella kreek, Granborie

The ACT team discussed the mapping exercise with the villagers in Drietabbetje in community meeting. The meeting with the *kapiteins, basia's* and other community members in Drietabbetje was intensive because of the problems with inaccurate information dissemination from the Clients' staff and other peoples. For example, an individual Ewald Poetisi (vice-chairman of the VSG) caused some confusion by talking to the captains of Puketi 2 and Godolo. He suggested first installing a commission to decide if a map would be necessary. This action caused confusion in the village. Also, the *kapiteins* of the different regions were afraid that their land would be divided. The elder *kapiteins* were thinking about not participating in the mapping exercise. When the younger *kapiteins* explained the importance of mapping, the elders agreed that ACT could help making a map. It took the ACT team several meetings to get clear and univocal ideas of the tribe on the mapping process.

Every morning before starting the mapping expedition, a brief meeting was held with the *kapiteins* and mapping participants of the different regions to decide which mappers and resource persons would participate in the exercise. Each time the tribe decided that the ACT team would map the area, and the assistant of the *granman*, Jopie Matodya would write the GPS coordinates. The underlying cause for such an approach was the trust issues between different *lo's*. To overcome trust issues, the tribe proposed to train a number of people from each *lo*. However, because some of the *lo* members could not write and read the tribe decided to have Jopie Matodja as the main person to facilitate *lo's* in the mapping process. As a result, no one was trained using the Garmin Etrex GPS, although some captains selected men from their village to participate in the training.

For the mapping exercise, the boat was filled with captains and local resource persons, approximately 5-10 people of one area. Working with these larger groups ensured extensive discussions on names of places. The ACT team participated in the exercise for marking the different creeks, camps, and land-use sites between Kasitiki and Doemang Singi Sula from February, 20-27, 2009.

Area: Kawina Ndyuka at Java

In December 2009 the Client decided to map the area of Java. This map was originally not in the Terms of Reference because Java lies in the Kleine Commewijne River and has been abandoned for a long period of time. The *Ndyuka* community is planning to return to this location, according to *kapitein* Noordzee and *kapitein* Frans Nijda (of Peniumica).

ACT made several attempts to conduct the mapping in the Java area. The first time, the boatman had not kept his promise to be in the Java area. The second and the third time someone from the village died. During the month of January 2010, ACT met with *kapitein*

Noordzee who had lived in Java before the village was abandoned. The *kapitein* decided to conduct a community mapping workshop. Four community members were trained to draw different symbols of land use on the map in a community workshop. The map was processed into a digital GIS map.

Land-Use Mapping of the Paramaka tribe

General pattern of land use

Most of the *Paramaka* villages consist of small houses near each other. No real roads are present in these villages. The *Paramaka* tribe has it villages, camps and people living along both sides of the Marowijne River. The creeks in this area are used as fish- and hunting resources, for transportation to agricultural grounds and sometimes for cultural purposes.

The history of this tribe can be traced back with old "faakatiki', the old 'krutu oso', and the practice of cultural ceremonies are proof of their presence in the interior. The main income of the *Paramaka* tribe is from (illegal) gold mining, selling of craft, agricultural products (cassava) and other non-timber forest products (*podosiri, kwak, cassave*)and other non-timber forest products (*podosiri*) to the people living in the French-border area. The *Paramaka* tribe can be classified as secretive; little of their history can be found in the common literature of Suriname. The *Paramaka* has approximately 4.000 members.

Approach to field mapping

The ACT team met two times with *Bestuursopzichter* Asaiti to discuss the approach, route and logistics of the mapping exercise before entering the field.

In the field, the ACT mapping team met with the *Paramaka* villagers in Langatabiki. During this meeting issues were brought up on promises of organizations (non ACT) that were not kept, and simply had nothing to do with the land-use mapping exercise. Half way through this meeting, the tribe decided that the mapping exercise was not needed and that the *Paramaka* would survive without the map. It took the ACT teams two days to discuss the advantages and disadvantages of a land-use map with the tribe. Eventually, the *Paramaka* tribe decided to make the map of their land between Pakira Kreek and Apoema Sula.

Two people of the *Paramaka* tribe were trained in using the Garmin Etrex GPS. The ACT team mapping team participated in the exercise for marking the different creeks, camps, and land-use sites of interest between Pakira creek and Loka Loka during March, 17-24, 2009.

Posoe Mofoe is an area that is claimed by three tribes: *Paramaka, Saramaka and Aluku*.

Some points near Posoe Mofoe were also taken, because the Client's staff explained that it prevents losing the land to the *Ndyuka* tribe. Therefore, specific attention was given to the mapping of the borders and *Ndyuka* tribe in the Posoe Mofoe area (at the junction of the Tapanahony river, Lawa river and Marowijne river).

Land-Use Mapping of the Aluku tribe

General Observations on Land Use

The *Aluku* tribe has villages, camps and people living along both sides of the Lawa River. Some tribe members live in the villages Papaiston and Maripasula in French Guyana. The creeks are mostly used as fish- and hunting resources and for transportation to their agricultural grounds.
The main income of the *Aluku* tribe is from (illegal) gold mining, support services for gold miners in French Guyana, selling craft and other non-timber forest products (podosiri, cassava, etc). The *Aluku* has two Granman's of which one is officially recognized by the French Government. The *Aluku* living in Suriname recognizes the *hoofd kapitein* as their *granman.* The *Aluku* has approximately 1500 members.

Approach to field mapping

In January 2009, the commitment was obtained from *bestuursopzichter* Waneti and *granman* Jacobi Emanuels to inform people in the *Aluku* villages of Cottica and Tabiki at the Lawa about the mapping project. The meeting's participants stressed that the *Aluku* territory starts at Boni Doro (Marowijne River – *Paramaka* area) and ends in the Toemak Hoemak Hills. Therefore, the community wanted to mark at least 2-3 places in the Toemak Hoemak area.
One person from the *Aluku* living in Suriname and one person of the *Aluku* living in French Guyana were trained to use the Garmin Etrex GPS. *Kapiteins* and *basia's* participated in the mapping exercise, in addition to ACT, for marking the different creeks, camps, and land-use sites of interest between Gonini creek and Awarasoela and Oelemarie vallen. The points of inerest in the Posoe Mofoe area was added to the *Aluku* map. The *Aluku's* cliam to be the owner of the area and in their percpetion the land has been lent to the *Ndyuka* tribe. The mapping exercise was held from 3-7 April 2009.

Transborder dispute

The border between the *Ndyuka* and *Aluku* area at the Lawa River and the position of the traditional authorities on the French and Suriname sides of the border was discussed. The border between *Ndyuka* and *Aluku* used to be at the confluence of Lawa and Tapanahony rivers. However, since the *Ndyuka* are more numerous, they are coming upriver and claiming ever more land that used to belong to the *Aluku*. Today the border, as set by the French based on their political decision of the country in communes, is placed much more upriver, at Abunami creek. There have been and still are many conflicts between *Aluku* and *Ndyuka*, mainly because the *Ndyuka* come and extract resources on *Aluku* lands.

In contrast, the relation with the *Wayana* indigenous peoples is good. The *Aluku* recognize that the *Wayana* occupied the Lawa River before they did. *Aluku* are living now in more places than were once occupied by the *Wayana*. *Wayana* are free to visit and extract resources at old kampus in the *Aluku* area. The border between *Aluku* and *Wayana* is not clearly demarcated, as the distance between the last *Aluku* village and first *Wayana* village is considerable. The ACT team and *Aluku* team met with the *Wayana hoofd kapitein* Miep of Anaipaike to discuss the

border issues. *Hoofd kapitein* Miep will have a meeting with members of his own tribe and *Aluku* tribe to further discuss the border issues between Posoe Mofo and Awara Soela.

Land-Use Mapping of the Matawai tribe

General Observations on Land Use

The *Matawai* tribe has villages and camps along both sides of the Saramacca River. There are three main settlements in this area, namely: Poesoegroenoe, Nieuw Jacob Kondre and Kwakoegron. Part of the upper-Saramacca River is located in the protected area of the Central Suriname Nature Reserve. The creeks are predominantly used as fish- and hunting resources and as a transportation path to their agricultural grounds.

The main income of the *Matawai* is from (illegal) gold mining, fishing and wage labour for the government. The *Matawai* from the upper Saramacca River differ from the *Matawai* living in the below Saramacca River. This difference is mainly caused by the presents of illegal gold mining activities in the below part of the River. The *Matawai* tribe has approximately 3000 members.

Approach to field mapping

The ACT team contacted the *kapiteins* of the *Matawai* Area through *district secretaris* Samuels. In the field, a meeting was held in Poesoegroenoe. In this meeting the tribe decided to divide the area in two pieces for the purpose of mapping: 1) the area between Raleighvallen Nature Reserve and the boundary area of Posoegroenoe and 2) the area between the boundary area of Posoegroenoe and Kwakoegron.

Two local people were trained to use the Garmin Etrex GPS. The ACT team participated in the GPS excise for marking the different creeks, camps, and land-use points of interest between the Raleighvallen Nature Reserve and the boundary area of Posoegroenoe. Points were taking the 1st area from 4-9 May 2009.

Even though ACT personally had an appointment with several *kapiteins* for a meeting in Nieuw Jacob Kondre (the 2nd area), no one was present for the meeting. The *kapiteins* were not in the village as was previously agreed upon. Some community members stated that they had no interest in the mapping of their area and proposed to have further discussions before taking a decision. This process would take one week or more. The ACT team left the area and decided to return when there was consensus among the *kapiteins* and tribe to execute the mapping exercise.

From January 29th – February 3rd, 2010, the ACT team visited the area between the boundary area of Posoegroenoe and Kwakoegron. Four people were trained to use the Etrex GPS. The ACT team was invited in a meeting with the *Matawai* elders to gather information about the territory. This information was gathered by asking the elders to place symbols on a printed base map of the *Matawai* area (community workshop).

Land-Use Mapping of the Kwinti tribe

General Observations on Land Use

The *Kwinti* tribe has villages and camps along both sides of the Coppename River. Part of the upper-Coppename River is located in the Central Suriname Nature Reserve (e.g. Raleighvallen). The creeks are mostly used as fish- and hunting resources and for transportation to their agricultural grounds.

The main income of the *Kwinti* is from selling fish, crafts, wage labour (school teachers, STINASU parkguards), and as tourist guides, cooks and maintenance personal of Raleighvallen. The *Kwinti* tribe is the smallest tribe with approximately 500 members.

Approach to field mapping

The Kwinti area is very small, and a large number of its tribal members live in Paramaribo. Therefore, the *Kwinti* did not conduct a community workshop.

The ACT team contacted *hoofdkapitein* Souvenier of the Kwinti's and *districtsecretaris* Clemens. None of the contacted leaders was present in the village when the ACT team arrived, in contrast with appointments made before entering the field. Two people were trained to use the Garmin Etrex GPS. The ACT team participated in the exercise for marking the different creeks, camps, and land-use sites of interest between Wayambo area and Raleighvallen from 20-25 April 2009.

In this area, the Client's team informed the community that the nature reserve should also be mapped. Because none of the captains was present at the time, the ACT team decided to leave and come back at a later date to discuss this issue. Consequently, the ACT team met with the *Kwinti* leaders in Paramaribo, to discuss the proceeding of the mapping project. The *Kwinti* delegation (*hoofdkapitein* Souvenier, *districtsecretaris* Clemens), decided that the missing parts of their area would be placed on their map during the verification round with the help of a chosen resource person from the tribe. The tribal leaders, resource persons and ACT met in Paramaribo on several occasions to complete the mapping process.

Land-Use Mapping of the Saramaka tribe

General Observations on Land Use

The *Saramaka* villages are located along the Suriname River and some in the Saramacca river. Also some villages are in the district of Brokopondo. *Saramaka* areas differ from each other. The area between Godo and Doewatra is an area where tourism is the main income generation activity. In the area between Doewatra and Sarakreek (including the Marowijne kreek) the main income is from (illegal) wood and gold mining.

The villages in the area between Godo and Sarakreek have utilities compared to those in the city Paramaribo: running water, electricity, telecommunication, schools, medical missions, gasoline pumping stations along the river and bakery's. The only place the above mentioned is not available is in the area of Marowijne creek.

The Grankreek is an underdeveloped area, with absence of a local school, medical clinic, telecommunication or other government structure. No villages are located in the area of Grankreek. However, some settlements were observed. Wood concessions are found in the area near Siksiman kriki, but the majority of goldmine activities can be found in this area. The largest goldmine is that of industrial Lieuw Paw Sam and Brunswijk. Bars, prostitutes, airstrip, ATV vehicles, cars and men with loaded guns protecting the (illegal) gold mining areas are a normal scene. The captains and authorities of the area take advantage of their position in the community by forcing Brazilian goldminers and wood loggers to pay a minimum of 10%

The creeks are used as fish- and hunting resources, transportation to their agricultural grounds and sometimes for cultural proposes. Some of the agricultural grounds can be found in the middle of or near the main villages (e.g. Pikin Slee). In some instances, villages have roads and are used by ATV's, cars or motorcycles of the villagers.

The history of some of the villages can be traced back more than 100 years; the old 'faakapau' is the main evidence of presence in the interior. The *Saramaka* tribe is largest tribe living in the interior with approximately 25.000 members.

Area: Sarakreek

The first area to be targeted was the gold-mining area of Sara kreek. The ACT team contacted Mr. Sieuw from the *Liew Paw Sam* goldmine, *districtsecretaris* of Brokopondo Mr. Albitrouw, and the *kapiteins* of the Sarakreek area. Other logistic arrangements (gasoline, boats, sleeping arrangements, etc) were made before departure to Sarakreek.

In Lebi Doti, the ACT held a meeting to explain the purpose of the mapping exercise. Two local people were trained to use the Garmin Etrex GPS. The ACT team participated in the exercise for marking the different creeks, camps, cemeteries, and other points of interest in the Sarakreek area from 26-30 June 2009.

Area: Boven Suriname River

The second area targeted was the Boven Suriname River; from Godo to Atjoni. One person in this area was trained for GPS use, also because there were trained GPS people from previous engagements in community mapping. The ACT held a meeting with the community in Asidonopo to discuss the purpose of the mapping exercise and input requested from the community. Because of problems with the *Saramaka* verdict in this area, the Client decided to travel along with ACT on this expedition. One person was trained using Garmin Etrex GPS. The ACT team and Client's team participated in the exercise for marking the different creeks, camps, cemeteries, and other points of interest in the Boven Suriname river area from 1-20 September 2009.

Area: Brokopondo

The third area targeted was the Brokopondo area including Brokopondo Centrum: Nieuw Lombe, Klaaskreek, Marchallkreek, Tapoeripa, Drepada, Asigoong, Balingsula and Boslanti. In Brokopondo, the ACT team met with the *districtscommissaris* Pryor and assistant *bestuursopzichter* Frenky Petrusi. It was then decided that *bestuursopzichter* Petrusi would guide ACT to the different villages and points of interest. The mapping exercise was divided into three areas: The area between Kraka and Klaaskreek, the area between Victoria and Afobaka, the area between Afobakka weg and Doewataa/Atjoni. The ACT team participated in the exercise for marking the different creeks, camps, cemeteries, and other points of interest in the Brokopondo area from 28 September – 3 October 2009.

Area: Santigron

The ACT visited the Santigron area on 4 December 2009*. Kapitein* J. Landveld and *basia* Pinas and Ms. Waterberg (Stichting Wederopbouw Santigron) explained that the community was not prepared. They explained that the Client should have contacted them two weeks in advance. Although ACT had contact with *basia* Pinas since November 2009, the community would be more comfortable if the Client contacted them beforehand. However, the tribal leaders handed over a map to ACT with borders defined by wood logging concessions. They explained that the logging map is the basis for their territorial land use. The map data was processed in GIS.

Area: Grankreek

The team visited the area of Grankreek from 16-22 February 2010. *Kapitein* Malone, the local leader, was not aware know he had to be present during the field expedition, and asked if the team could come at a later time period to GPS the area. . *Bestuursopzichter* Amoko did not communicate the need for a resource person to *kapitein* Malone. Consequently, no people were trained to use the Etrex GPS. The boatmen were showing points of interest with the help of some gold miners and local community members of the Siksiman kampu. The *kapitein* marked some additional points of interest on the map.

Existing Map and Verdict

On June 25th 2009, the project team from the Client contacted ACT to halt further mapping activities in the *Saramaka* area. The *Saramaka* community wanted more clarity on the relationship between the verdict of the IACHR and the community mapping project. ACT was participated in a meeting in Abenaston on 11-12 July 2009 to discuss the mapping methodology with the community and provide clarification where necessary. The *Saramaka* tribe needed further deliberation on this issue, and the ACT team awaited the response. The total delay took about two months.

The *Saramaka* tribe already has a land-use map that was used for the case of the *Saramaka* lo's in the IACHR. The question whether this map is digitally available remains unclear. ACT has not received this map to complete the project.

3.3 Challenges in the Community Mapping Process

Logistics

ACT-Suriname was responsible for organizing logistics for the mapping process. In most cases, the village authorities were contacted and asked for the proper way to organize the expedition. Some villages could only be reached by charter airplane while others needed to be reached by trips in dugout boats. Then, the village authorities appointed a person who would work with ACT to organize the logistics, after which the research team traveled to the different villages. Villages in close proximity were clustered based on the Client's communication program. At that time, the fieldwork was ready to commence.

Challenges with the Execution of Field Activities

In beginning of the community mapping exercise, the main challenge was the **inaccurate information dissemination**. The communities understood that the ACT mapping team would set borders in their territory, as a result of previous meetings with the Client's staff. This led to confusion in the communities, and required additional meetings with the *kapiteins, basia's*, village elders, women groups and others were needed. In these meetings the authority of the Government was stressed in the demarcation process. Also, the specific community decides how to depict the border area with other tribes.

With the constant threat of **extreme drought** in the interior caused by the el niño phenomenon, the team decided to start with the mapping expedition in the Marowijne River in February 2009 (figure 1). The *Ndyuka* area was mapped first (orange). Second, the team visited the areas of the Aluku (green), Paramaka (light yellow), *Matawai* (light blue), *Kwinti* (maroon) and the *Saramaka* community near Sara kreek (orange). Areas which were extremely dry were mapped in January and February 2010.

The **withdrawal of the coastal indigenous groups** that are residing under the VIDS have caused problems during the mapping project. VIDS was not agreeing with the methodology used for the project. As a result, the existing map of the Lower Marowijne and North-West Suriname were not made available by the VIDS. However, captains of two villages (Julius K and Frederik Stuger of Bernarddorp and *Kapitein* Anderson of Tibiti) residing under the VIDS have contacted ACT because they wanted to have their area mapped, even after the decision was taken by VIDS not to participate.

The ***Saramaka* participation was disturbed by the VSG .** The group that went to IACHR court for the *Saramaka* case (VSG) did not agree with the methodology used for the mapping project. However, the *granman* of the tribe wanted to go ahead with the exercise. The divide between these two groups led to several community meetings with Client, the community and ACT to discuss the mapping methodology, the use of the maps and the ultimate goals for granting collective rights. In the end, the tribe decided to participate in the community mapping. The group that went to court made it difficult for the ACT team in the field, and used intimidation and media to express their non-compliance with the project.

Administrative difficulties have resulted in a late start of the project and late payments under the contract between ACT and the Client resulted in a delay of two month.

The **trust issues within tribes** created problems for implementing the mapping project. For instance, the *Ndyuka* wanted the tribal leadership to have overall coordination of the project. As a result, there were no people trained in the different villages.

Tribes can be **disappointed with other organizations**. Specifically in the *Paramaka* tribe, the community members were not open to new development. Therefore, the ACT team needed to have extensive meetings with tribal members to explain the need for such a mapping process.

3.4 Verification of Field data

The verification process was performed by a joint effort of the Client and ACT. Each community, either in a cluster or alone, was visited to discuss the draft map. In preparation to the verification, about 25 people of the Ministry of Regional Development active in the interior were trained by ACT to use a standard methodology for verification on November 27, 2009. ACT prepared a power point presentation and verification manual that was translated into *Sranang Tongo* to ensure a standardized process[8] (Annex 3). The manual was used as a reference when conducting the community workshops. Also, all material for the community workshop were prepared and delivered by ACT. The verification methodology made use of different colors to verify the position and names of hunting and fishing grounds, agricultural plots, goldmining and logging areas, villages and huts and sacred places.

The verification of the data gathered by the communities started in December 2009. In each community, a workshop was held to discuss the draft map. These community workshops were executed by the Client with the help of ACT, given the sensitivity of the project.

Members of tribes visited the ACT team to discuss and explain the changes made on the maps. The tribes felt comfortable to have the ACT team as their walk-in partner to discuss map issues (amendments). Specific meetings were held with the *Kwinti*, *Ndyuka* from Java, *Saramaka* from Santigron and the *Paramaka*. In many cases, names, pictures and logo was discussed to make the format of the map complete. ACT ensured to have at least two people (GIS expert and field mapper) in the office available for the tribes and the Client in this process.

The Client delivered the correct spelling of names and the points of interests for all maps to ACT.

Challenges: During the verification process, the *Ndyuka* and *Paramaka* tribes took advantage of the verification process and added a large amount of additional information on the map. Therefore the Client and ACT decided to deliver both the maps that were made before verification and after verification as project results.

An overview of the verification rounds is given in Annex 5.

[8] The verification training was not requested in the Terms of Reference. However, to ensure the quality of the work, ACT made the effort to train as much people for the utmost community participation.

3.5 GIS processing of Field data into one map

This chapter provides an overview of the making of one comprehensive land use map for the whole territory of Suriname.

The participatory mapping methodology used by ACT is approved by the GOS since the first map was released in 2000. In contrast with institutions that were also engaged in community mapping, ACT has an official collaboration with the Geographic Land Information Systems, who supervises and holds the national cartographic database in Suriname (Annex 9).

Existing GIS maps

For the territory of Suriname, the maps of the different communities will be gathered and GIS processed into one comprehensive land use map. According to the Terms of Reference, the map should depict the different concessions for land use as well as the national protected areas. Some communities have already undergone a community mapping process with the help of international organizations or NGO's. The maps of the community land use areas that have undergone community mapping are depicted in table 2. These maps should be made available to ACT in digital form to compile the one comprehensive map. However, the map of the Cottica was only made available in a non-GIS format. Maps from Trio and Wayana were made available by ACT with permission of the communities. Maps of Kaliña and Lokono and the *Saramaka* of the Gran Rio were not received, even after several attempts to meet with the community representatives by the Client and ACT.

Table 2. Existing living and user maps of indigenous and maroon communities in Suriname

Organisation	Collaborator	People	Area/Communities
ACT-Suriname	Native Lands, ACT, GBMF, OAS	Trio	Southwest Suriname; Corantijn River, Lucie River, Kuruni River, and Sipaliwini River watersheds
ACT-Suriname	Native Lands, ACT, GBMF	Trio and Wayana	South-Central Suriname; Upper-Tapanahony River watershed
ACT-Suriname	ACT, WWF	Wayana	Upper Lawa River watershed
PAS	PAS, FPP, LEO	Ndyuka	Marowijne district; Cottica River area
CI	CI	Saramaka	Central Suriname Nature Reserve; [Pikin-Rio/Gran-Rio]
VIDS	IUCN Netherlands	Lokono	North-West Suriname
VIDS	Unknown	Kariña and Lokono	Lower Marowijne, incl. Wanekreek watershed
VSG	Unknown	Saramaka	Upper Suriname River, Pikin Rio, Gran Rio
Tropenbos Sur.	Tropenbos, VIDS	Lokono and Kariña	Carolina landscape, incl. Copie Nature Reserve (in process)

The ACT team contacted the Client and asked to do an official request for the maps because of their intellectual property. In addition, the ACT team executed the following activities to get the digital version of the above mentioned maps that were non-ACT made.

Ndyuka map (PAS)

In January 2009, The ACT team met with Christine Naarden and Greetje de Wolf from the PAS to discuss the status of the map of the *Ndjuka* along the Cottica River. This map covers the living and user areas of the *Cottica Ndyuka*.. The map makers are the Pater Albrinck Stichting, Forest peoples Programme, and Local Earth Observation. The owners of the map are the Foundation Kon Taki Makandii and Cottica Uma. The PAS is willing to share the map of *Cottica Ndyuka* after consultation with the owners (Cottica Ndyuka).

The Client contacted the community and they were willing to make the map available. However, because the owners did not have the digital map, only the hard copy version was made available.

Saramaka map (CI)

In November 2009, the Client instructed ACT to contact the Gran Rio community to obtain the map of the Gran Rio/Pikin Rio rivershed from Mr. Stanley Malone in November 2009. Several attempts were made by ACT to obtain this map. Mr. Malone communicated that the map cannot be released without permission from the GOS. No maps were received by ACT. The map of the Gran Rio/Pikin Rio has been delivered to ACT in July 2010 in a non-GIS format.

Processing of maps

After discussion with the client, ACT decided to propose the following for the map made available in hard copy. This map, of the Cottica area, will be outlined in the comprehensive land use map. In this way the GOS can still have an overview of amount of land used by the communities, and see if it conflicts with existing concessions and nature parks.

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Annex 1: ACT training manual for GPS use and data transfer (the first 4 pages)

ACT
GARMIN ETREX
KARTA HORINA-ANU

Wan publikasi fu Amazon Conservation Team Suriname

Toto

I. Wan tu prakseri na fesi fu wan

A eTrex, di yu kan ori nanga wan anu fu di a e wegi siksi onsu, na wan GPS fu fanga boskopu,.kaba a abi tinatu kanari. A GPS anteni fu en de na en inibere. A abi feyfi knopo fu wroko nanga en. Ala den knopo seti na en seybere so taki yu kan wroko nanga wan anu nanga en sondro fu yu anu e tapu a fensre taki yu no kan si en. Yu kan wroko te nanga 16 yuru nanga tu AA batrèy efu den e wroko wan aladey fasi. Te den batrèy e wroko na wan toputopu fasi yu kan wroko 22 yuru langa nanga den.

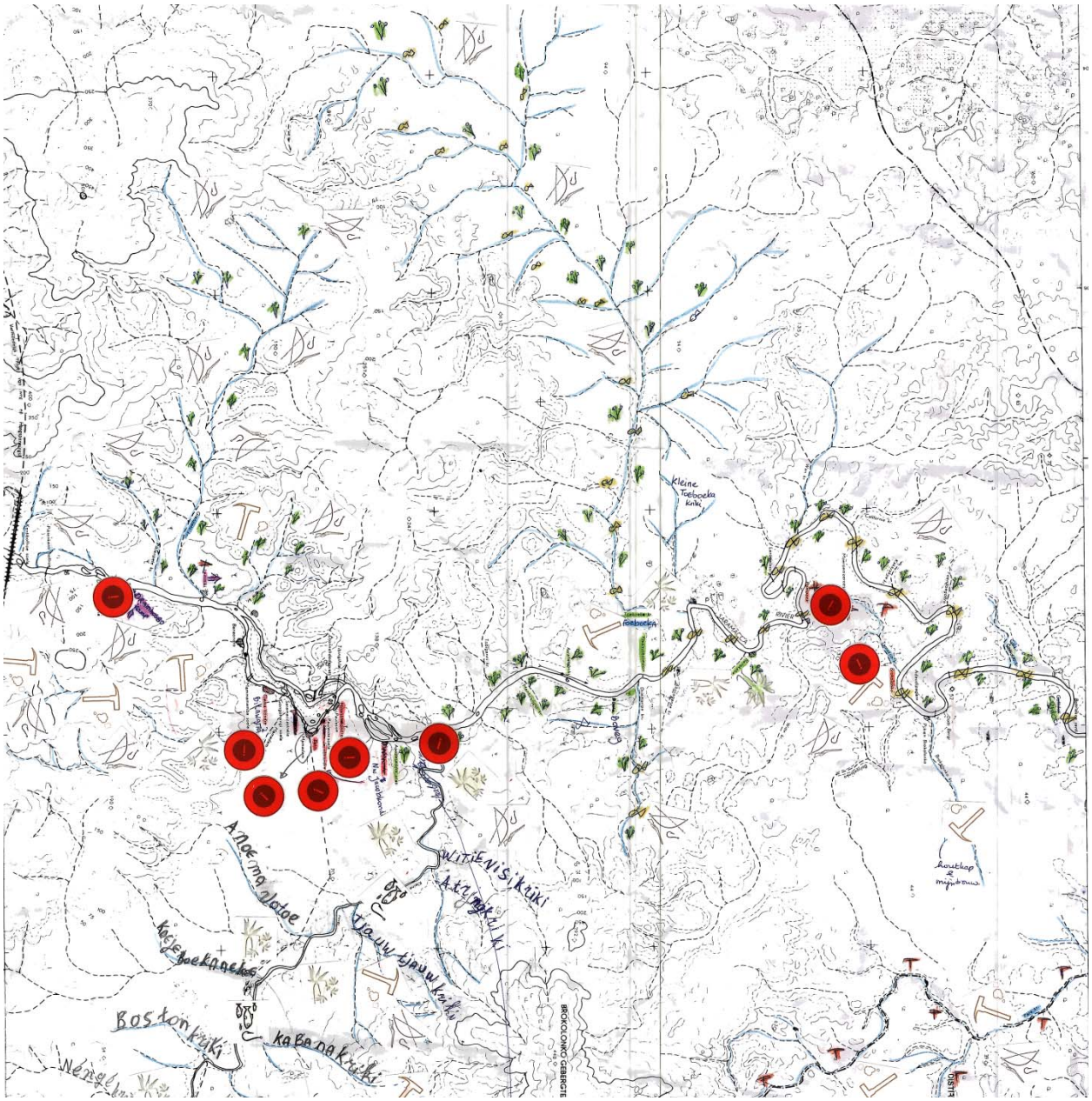
Boyti taki yu kan feni o pe yu de, a eTrex man meki yu kibri presi leki elektroniki kepikepi na pasi na ini en tonton te yu gi den wan nen, so taki sensi yu wani, yu kan feni den presi disi baka. Dan baka, sensi yu bigin waka, a GPS e gi yu moro trusabi. Trusabi so leki o esi yu e waka nanga o sey yu e waka go, o fara a presi de pe yu wani go, omeni ten a o teki fu doro drape nanga tra sani moro.

I. Wan tu prakseri na fesi fu wan

Tra koni san eTrex abi na:

- A e wroko nanga a WAAS sistema, so taki a man sori yu wan kepikepi na pasi na ini fu dri meytri
- Kepikepi na pasi: den nen nanga den agersimarki fu 500 kepikepi na pasi
- Pasi san yu waka kba: eTrex srefi e hori buku fu enꝛ 10.000 kepikepi na pasi a man sori yu. A man kibri 10 pasi san yu waka kba (750 kepikepi na ini pasi)
- Pasi san yu kan teki: eTrex man sori yu 20 pasi , iniwan nanga 125 kepikepi na pasi
- A pasi san yu e waka now: eTrex man sori yu 31 difrenti sortu trusabi so leki: o esi yu e waka now, o esi yu waka te nanga now, a moro esi san yu waka, sortu uku di yu abi nanga nortusey, o hey nanga o pe yu de, o ten son e opo, o ten a e dongo, o langa yu de na pasi nanga o fara yu waka kba. A e gi okasi fu wroko nanga tu presi wán tron.
- Trusabi fu onti efu fisi.

Annex 2: Example of community workshop result



Annex 3: ACT verification manual for community mapping (first 4 pages)

THE AMAZON CONSERVATION TEAM SURINAME

Verificatie van de landgebruikkaarten

Instructie handboek ten behoeve van de verificatie ronden.

De data die is verzameld tijdens het Support For Sustainable Development of The Interior (SSDI) project zal samen met de verschillende gemeenschappen nagegaan moeten worden, zodat de juiste en correcte data op de finale kaarten weergegeven wordt.

Instructies voor het nagaan van de landgebruikkaarten

Over de informatie op de landgebruikkaarten moet er worden gesproken met het traditioneel gezag, de GPS assistenten en de belangrijkste mensen in het dorp, al dan niet het gehele dorp.

Het is belangrijk dat de mensen die hebben de GPS hebben gebruikt er bij zijn, omdat de verzamelde informatie (plekken, namen, etc.) die in de GPS en nu op de landgebruikkaarten zijn geplaatst door hun is verzameld.

Het is belangrijk dat de kaart ergens in de vergaderzaal wordt opgehangen, zodat iedereen er naar kan kijken en hun commentaar bij de traditionele leiding neerlegt.

Indien er op- en aanmerkingen zijn op de kaart dan zijn de hieronder aangegeven instructies voor het verbeteren van de kaart.

Men moet tijdens de verschillende vergaderingen rekening gehouden worden dat dit **LANDGEBRUIKKAARTEN** zijn.

Gereedschappen voor de verificatie van de landgebruikkaarten

Gereedschappen die nodig zijn voor de verificatie zijn:

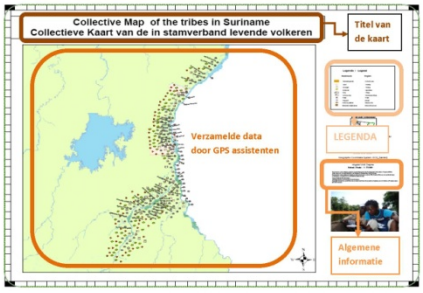
1. Schrijfgerei tijdens de vergaderingen
2. Schrijfgerei voor aanvullingen/correcties van de landgebruikkaarten, te weten:
   a) **Verschillende permanente viltstiften:**

Zwart wordt gebruikt voor naam correcties
Rood wordt gebruikt voor de culturele plekken
Goudbruin wordt gebruikt voor mijnbouw gebieden
Lichtgroen wordt gebruikt voor kostgronden
Legergroen wordt gebruikt voor jachtgebieden
Oranje wordt gebruikt voor visgebieden
Geel en paars worden gebruikt voor kampen/dorpen
Blauw: "nieuwe toevoegingen"

   b) **Liniaal**

Verschillende onderwerpen op een landgebruikkaart

Een kaart bestaat uit verschillende onderdelen, namelijk:



De verschillende onderdelen die tijdens de verificatie aangehaald moeten worden zijn:

1. De titel van de kaart
2. De verschillende symbolen/namen op de landgebruikkaart en de aanpassingen/correcties ten aanzien van hun aangegeven locatie
3. De algemene informatie
4. Toevoegingen op de landgebruikkaart
5. Vormgeving van de landgebruikkaart

De Legenda

De verschillende symbolen op de landgebruikkaart zijn weergegeven in de LEGENDA

Symbool correcties op de landgebruikkaarten

Met behulp van de verschillende **gekleurde permanente viltstiften** en een **liniaal** zal er zoals boven is aangegeven correcties op de kaart betreffende de locaties van de symbolen op de landgebruikkaart.

ANNEX 4: MAPPING EXPEDITIONS

Ndyuka area: 9th of February until the 28th of February, 9th of March until the 12th of March 2009. Moiwana was mapped in the period 25th of May until the 27th of May 2009. Ndjuka-Kawina at Java was mapped in January 2010.

Paramaka area: 17th of March until the 24nd of March 2009.

Kwinti area: 20th of April until the 24th of April 2009.

Aluku area: 3rd of April until the 7th of April 2009.

Matawai area: 4th of May until the 9th of May 2009 and from 29th January until 3rd of February 2010.

Saramaka area: 26th of June until the 30th of June 2009, 1 until 20 September 2009, 28 September until 3 October 2009 and 16 February until 22 February 2010.

ANNEX 5: VERIFICATION ROUNDS IN THE COMMUNITIES

	Area	Location	Period –first verification round	Final approval of map
1	Kwinti area	Witagron	4-6 december 2009	
2	Paramaka area	Langatabiki	8-10 december 2009	
3	Pakira-Albina		11-13 december 2009	November 2010
4	Albina		12-13 december	
5	Tapanahony *(Sanga masusa- gaan boli)*	Drietabikie	16-19 december	November 2010
6	Tapanahony *(tjon tjon/poowi ngonini kiiki/Ampomatapu)*	Stoelmanseiland	27-29 januari	November 2010
7	Cottica/Lawa *(alle dorpen van de Boni's)*	Cottica	21-22 december	
8	Moiwana *(Dorpsbestuur)*	Moengo	16-17 februari	
9	Upper Suriname *(pokigron, Abenaston, Aurora, Guyaba, Semoisi, Godo en Asidon opo)*	Asidonopo	19-24 maart	November 2010
10	Sarakreek *(Lebidoti, Bakoe en Pisang)*		27 februari-1 maart	November 2010
11	Matawai area *(Posoegroenoe) (Nw Jacob, Kwakoekondre)*		19-24 april	
12	Brokopondo	Brokopondo Centrum	9-11 april	November 2010
13	Java		12 juni	
14	Santigron		5 juni	
15	Grankreek		Juli	November 2010

ANNEX 6: COMMUNITY MAPPING PARTICIPANTS

- **Ndyuka area**
    - Abena, Nosjong (Captain)
    - Abosimi, Pasoni (Captain)
    - Adelaar, Ajowetie (Captain)
    - Adeni, Adam (Captain)
    - Adenni, Loedja (Captain)
    - Alikani, G (Captain)
    - Amining, Reinier (Captain)
    - Amonie, Toekoe (Captain)
    - Anaje, Dewini (Captain)
    - Anatoewe, Doris (Captain)
    - Apasi, Adelmo (Captain)
    - Apaya, Koti (Captain)
    - Apintoe, Johannes (Captain)
    - Asafarde, Afoedini (Captain)
    - Asimiejang, Daniel (Captain)
    - Asongi, Jacob (Captain)
    - Atoemoesoe, Carmen (Captain)
    - Awajona, Sabie (Captain)
    - Bakase, Bonkane (Captain)
    - Balaman, B (Head Captain)
    - Balong, Johannes (Captain)
    - Banketie, Bolon (Captain)
    - Besini, Monica (Captain)
    - Bree, Jowanie (Captain)
    - Clemens, Andre (Captain)
    - Corgnac, Coffie (Captain)
    - Djagoema, Djego (Captain)
    - Djanie, Johan (Captain)
    - Dwengi, Wajo (Captain)
    - Fransina, Tom (Captain)
    - Gagoe, Amerkang (Captain)
    - Galon, Jonas (Captain)
    - Gazon, Baja (Captain)
    - Gazon, Thomas (Captain)
    - Gonoe, Leo (Captain)
    - Jona, Alfons (Captain)

- Kamo, Johan (Captain)
- Kanape, Belije (Captain)
- Koorndijk, Kanawie (Captain)
- Liono, Vandelli (Captain)
- Lome, Soko (Captain)
- Malto, Eddy (Captain)
- Mannies, Vandies (Captain)
- Masadee, Awingie (Captain)
- Misiedjan (Captain)
- Misiedjan, Kowboy (Captain)
- Misiedjan, Telia (Captain)
- Nanshe, Feslobi (Captain)
- Papaso, J. (Captain)
- Piekenpai, Apaimi (Captain)
- Pinas, Daniel (Captain)
- Pinas, Koko (Captain)
- Pompe, Ronald (Captain)
- Prika, Koffie (Captain)
- Raafenberg, Rene (Captain)
- Redimoesoe, Loekie (Captain)
- Sante, Henk (Captain)
- Siwo, Morris (Captain)
- Tergie, Doling (Captain)
- Tommy, Eddy (Captain)
- Tose, Abeliga (Head Captain)
- Valentie, Carmen (Captain)
- Velantie, Jesentoe (Captain)
- Velantie, Oto (Captain)
- Matodya, Jopie (secretary of Granman Matodya)
- Adaba, Frans
- Adaba, M.
- Adermo
- Akoeba, A. R.
- Akoeba, R.
- Anomisi, Lando
- Awenkina, R (goninimofo)
- Bee, Marinus (District Secretary – RO Albina)
- Boerstam

- Dehli, Ronnie
- Koejontoe (village elder)
- Lima (Basja)
- Matoe, Alex
- Maudo, B
- Poa, Wena
- Sobin
- Soke (Basja)
- Tiidan
- Tote, Otto
- Garie, Adam Petrus (Captain)
- Kana
- Asoman, F
- Pugor, Lloyd
- Evert
- Ajintoena, Ernestine
- Abiegnie, Andre
- Polisi (Basia)
- Noordzee (Basia)
- Noordzee (Captain)
- Theo Aupa
- Frans Nijda (Captain)

Paramaka area

- Abagi, A (Head Captain)
- Aboeka, Annemarie (Captain)
- Aboeka, Papa (Captain)
- Akuwi, Kanaidjoe (Captain)
- Apensa, Petrus (Captain)
- Asaitie, Jozef (Captain)
- Babel, Max (Captain)
- Besijenso, Petrus (Head Captain)
- Boi Boi, F (Captain)
- Ceder, Hendrik (Captain)
- Ceder, J (Captain)
- Ceder, Theresia (Captain)
- Doedoe, Walter (Captain)
- Ezechief, Paulus (Captain)

- Geenen van, Johannes (Captain)
- Jarinde, F (Captain)
- Kamilie, Antoinette (Captain)
- Ma Sanna, Rosa (Captain)
- Mafo, Markus (Head Captain)
- Meya, Apajaka (Captain)
- Midada (Captain)
- Pente, Dina (Captain)
- Sanna, Lucas (Captain)
- Senfo
- Doedoe, Jozef
- Blee, Iwan
- Thomas (basja)
- Ameikan, Carlo (BO)

Kwinti area

- Souvenier, Harold (Head Captain)
- Emanuel, Willem (Captain)
- Clemens (Secretary)
- Roland (Basja)
- Markus, Lorenzo
- Samuels, Leroy
- Jonathan, Wilm
- Emanuel, Hendrik

Aluku area

- Emanuels, Jacobi (Head Captain)
- Doea, Nawang (Captain)
- Paisi, Loang (Captain)
- Doea, Amaisi (Captain)
- Chimili (Head Captain)
- Topo, Louis
- Assapoli, Raimond
- Sommies, Delanon
- Kouata, Tovine

- Sike
- Waneti (BO)
- Abianso, Antoine
- Fineli, Abiensoe

Matawai area:

- Asaf, Irene Beatrice (Captain)
- Dolia (Basja)
- Edo (Basja)
- Elan, Freddie (Captain)
- Emanuel, Aloema (Captain)
- Emanuel, Samuel (Head Captain)
- Eva, Alfonsus (Captain)
- Fernando
- Flink, R
- Gadden, Theo (Captain)
- Humfry (Basaj)
- Joel (Basja)
- King, A
- Leons, A (Captain)
- Rinaldo (Basja)
- Sebastian, Lukas (Captain)
- Sedney, Lesly (Captain)
- Tweeling, N. (Captain)
- Werny (Basja)
- Willems, Wilson (Captain)
- William (Basja)

Saramaka area:

- Baboo, Leo
- Baboo, Ramon (Captain)
- Doebe, Alwin
- Mangretha
- Doe, Je
- Same Cicilia (BO)
- Boots, Albert
- Aleki Waldy (Head captain)

- Landveld Richard (Captain)
- Doebe (Basia)
- Prijor M (Basia)
- Dodo (Basia)
- Amoko (Basia)
- Pina (Basia)
- Losia (Basia)
- Same (Basia)
- Doebe (Basia)
- Pansa Dennes (Basia)
- Emma (Basia)
- Pobosie Nora(Basia)
- Bisoina (basia)
- Pansa Mange (basia)
- Aserie Rodney (basia)
- Kentie Adodo (basia)
- Baabo (basia)
- Pansa Carmen (basia)
- Bea (basia)
- Sandrina (basia)
- Boobe(basia)
- Vola(basia)
- Amoko Eddy (BO)
- Sameh Cecilia (BO)
- Baisie Sandelie (Captain)
- Vrede Dorus (Captain)
- Lila Frits (Head captain)
- Wilma Prika (Captain)
- Pinas B (Captain)
- Poina M. (Captain)
- Koedemoesoe Apalo (Captain)
- Abauna Ruben (Captain)
- Eduard Wanze (Head captain)
- Geddeman Zevie (Captain)
- Wens Harry (Basia)
- Fedries Hendrik (Head captain)
- Majokko Olang (Captain)
- Dinge Frits (Announcer)
- J. Landveld (Captain)
- Pinas (Basia)
- Triesie

ANNEX 7: TEAM OF CONSULTANTS

Gwendolyn Emanuels-Smith MSc.	Team Leader
Marieke Heemskerk Phd.	Cultural Anthropologist
Katia Delvoye MSc.	Land Use specialist
Sahieda Joemratie	Mapping coordinator
Kenneth Wongsonadi	Mapping trainer
Wuta Wajimuu	Mapping trainer
Melvin Uiterloo	GIS assistant
Rachel Bong A Jan Bsc.	GIS assistant
Wesley Pacheco Msc.	GIS cartographer
Eric Sosrojoedo	Logistics coordinator
Natasha Aroeman	Administrative coordinator

ANNEX 8: TERMS OF REFERENCE FOR THE ASSIGNMENT

TERMS OF REFERENCE

SUPPORT FOR THE SUSTAINABLE DEVELOPMENT OF THE INTERIOR

(SU-T1026)

CONSULTING FIRM – COLLECTIVE RIGHTS

I. BACKGROUND

1.1 The Government of Suriname (GOS), with the support of the Inter-American Development Bank (IDB) and the Japan Special Fund (JSF), is undertaking the commitment articulated in the Government Declaration of 2006-2011 to improve the administration and development of the Interior. The GOS has recently embarked on a comprehensive approach for the planning and eventual implementation of a sustainable development program for the Interior. This approach includes a strong participatory methodology that ensures that the target beneficiaries are involved in the planning and implementation of their own development priorities and that the focus of the program is aligned around their rights and interests. The IDB is providing preparation and design support through a technical cooperation project financed by the Japanese Special Fund (JSF), a trust fund managed by the IDB.

1.2 The technical cooperation project will have three major components including:

a. Component I: Development Planning for the Interior. This component will include: (i) an assessment of current activities; (ii) a community planning and consultation process; and (iii) support for stakeholder coordination.

b. Component II: Collective Rights. This component will include: (i) Land Rights; and (ii) Support for Traditional Authorities.

c. Component III: Institutional Strengthening. This component will include support for the: (i) Ministry of Regional Development; (ii) Traditional Authorities; and (iii) Local organizations and NGOs.

II. CONSULTANCY OBJECTIVES

2.1 The primary objective of this consultancy is to provide technical assistance regarding the activities included in Component 2 – Collective Rights as outlined in the Plan of Operations for this project.

2.2 In addition, the consultants will develop a detailed recommendation, based on their work for this consultancy, for a collective rights component to be included in the anticipated loan operation.

III. CHARACTERISTICS OF THE CONSULTANCY

3.1 Type of consultancy: The work will be carried out by a consulting firm, association of firms or an association of individual consultants. The consultants comprising the team may be national and/or international. The contract is a Lump Sum Contract[9]. The payment schedule is presented in Chapter V of these Terms of Reference.

3.2 Starting date and duration: All activities are to be completed and reports to be submitted within 8 months from the signature of the contract. Consultants are asked to submit a proposed calendar of personnel activities as part of the technical proposal.

3.3 Place of work: All work by all consultants will be carried out in Suriname. This consultancy will require some travel outside of the capital, Paramaribo.

3.4 Qualifications of the consultants: The core team for this consultancy should consist of a minimum of three (3) national and/or international consultants and one (1) national assistant: The consultants have the option of including additional team members within the limits of the available budget, if they consider these appropriate for the satisfactory completion of the required work.

3.5 All consultants comprising the team must have a strong educational and professional background in their area of specialization, with a minimum of 5 years experience in carrying out the type of work described in the Plan of Operations, which is required for the present consultancy. Consultants must have demonstrated experience in working effectively with Indigenous and/or Maroon communities and leaders or similar communities and leaders in other countries, and have strong interpersonal and communication skills, As a team, the consultants must be able to express themselves fluently in both Dutch and English, and have at least some members proficient in Sranan Tongo and one or more Indigenous or Maroon languages. In addition, familiarity with sensitivities and challenges related to the thematic areas of the project; prior knowledge of ongoing initiatives related to Interior development in Suriname; experience with Indigenous and Maroon land rights and tenure under similar circumstances in other countries; and knowledge of the procurement rules and guidelines of the IDB would all be considered assets.

3.6 Travel to and stays of several consecutive days in various parts of the Interior are required as part of this consultancy. Given the inaccessibility and lack of infrastructure in the Interior, such travel and stays can be challenging. All relevant members of the consultant team must be willing and able to undertake the required trips in a manner that allows them to fulfill their assigned functions.

IV. ACTIVITIES

4.1 This consultancy includes five main activities: (i) Land Rights, Tenure and Use Study; (ii) Community land use mapping for the Interior; (iii) One comprehensive land use map of the Interior; (iv) Support for the implementation of the Moiwana decision; and (v)

[9] As defined in paragraph 4.1 of the IDB's Policy for Selection and Contracting of Consultants Financed by the Inter-American Development Bank.

Support for Traditional Authorities. With respect to these elements the consultants will, at a minimum, carry out the activities described in paragraphs 4.2 – 4.5 below.

4.2 Land Rights, Tenure and Use Study

a. The consultants will prepare a comprehensive study to identify and document land tenure regimes and land use by the Interior communities. This activity will be carried out in close collaboration with Indigenous and Maroon authorities and other stakeholders and will include information regarding current land use practices, changes in land use over the last twenty years and customary law relating to land tenure and use. The study will include recommendations for the legal framework necessary to support communal management and administration of traditional lands in the Interior. Land use maps that have been developed by Indigenous and Maroon communities with the support of various non-governmental organizations and the GOS's Central Bureau of Cartography (GOS-CBL) will be used as the orientation point for this study.

4.3 Community Land Use Mapping

a. The consultants will also undertake a community land use mapping process for those Indigenous and Maroon communities that do not already have a GIS-compatible map[10]. This activity will follow the methodology already established which includes hiring and training of community members to assist with data gathering and community relations.

b. Once all relevant information has been gathered, the consultants will produce one map for each community as identified. These maps will be presented to the communities for their approval prior to the final presentation to the Government of Suriname.

4.4 Comprehensive Land Use Map

a. Building on the activity outlined above, the consultants will be responsible for developing one comprehensive land use map for the whole of the Interior. This comprehensive map will combine the land use maps developed by Indigenous and Maroon communities in collaboration with the GOS-CBL with the land use maps produced under this project (see above section 4.3). The comprehensive map will identify any overlaps between and among communities, as well as with government sanctioned nature reserves, protected areas and existing commercial natural resource concessions for the purpose of identifying community boundaries.

b. The consultants will be required to propose a methodology for community engagement to complete this task and will be required to work with Indigenous and Maroon community leaders to implement this methodology.

4.5 Support for Moiwana Decision

[10] These communities are: the Saamaka of the Suriname and Saramacca Rivers; the Aukaan of the Tapana-hony, Marowijne and Cottica River areas; the Paamaka of the Marowijne River area; the Matawai of the Saramacca River area; the Kwinti of the Coppename River area; the Aluku of the Lawa River area; the Kalinha and Lokono of the Wayambo/ Coppename area; the Kalinha and Lokono of the Saramacca River areas; the Kalinha and Lokono of the Zanderij/Para/Wanica area and the Lokono of the Wageningen area.

a. In addition, planning support for the implementation of the Moiwana decision will be provided to the Moiwana Commission. This support will include technical assistance to draft a land tenure and sustainable development plan for the Moiwana community in eastern Suriname in accordance with the judgment of the Inter-American Court of Human Rights.

4.6 Support for Traditional Authorities

a. Within the context of the work outlined above and after consultations with the Traditional Authorities and other stakeholders, the consultants will develop recommendations for the legal framework that will be required to formally recognize the rights, duties and responsibilities of Indigenous and Maroon traditional authorities as they relate to land, natural resource management and use and national representation.

V. REPORTS & PRODUCTS

A. Type and Content of Reports and Products

5.1 The Consultant will deliver six (6) reports:

a. **Initial Report**. This report includes a summary of all preparatory activities undertaken, any questions or points for clarification that have arisen, a brief discussion of any issues that are likely to affect the satisfactory completion of the work, basic methodology for the activities and community engagement and an up-dated work plan. The Initial Report should be no more than 10 pages in length, and must be submitted within 30 calendar days of the consultancy start-up date.

b. **Draft Report on Land Rights, Tenure and Use Rights**. This report presents the results of the study to identify and document land rights, tenure and land use by the Interior communities including all elements described in section 4.2 in a well-argued, concise and clear manner. The report (including annexes, figures, tables and other supporting materials) should be no more than 40 pages, and must be submitted within 90 calendar days of the consultancy start-up date.

c. **Final Report on Land Rights, Tenure and Use Rights.** This is a revised version of the draft report, incorporating feedback received from the Ministry of RO, other relevant stakeholders identified by the Ministry and the IDB. Depending upon the nature of the feedback received, the Ministry and the consultants will agree on a reasonable timeline for submitting the final report.

d. **Final Report on Community Land Use Mapping process and copies of the maps produced under this project.** This report will include a summary description of the process used to develop the new community land use maps and copies of the maps themselves. The maps will be at least one square meter in size, on appropriate paper and laminated. The maps will also be submitted in digital format on CD ROM. The report with all annexes must be submitted within 6 calendar months of the consultancy start-up date.

e. **Final report on Moiwana Land Tenure and Sustainable Development Plan.** The report with all annexes must be submitted within 4 calendar months of the consultancy start-up date.

f. **Final report and recommendations for the Traditional Authorities legal framework.** This report presents the recommendations for the legal framework described in section 4.6 in a well-argued, concise and clear manner. The report (including annexes, figures, tables and other supporting materials) should be no more than 40 pages, and must be submitted within 8 months of the consultancy start-up date.

5.2 In addition to the reports discussed in the previous paragraph, the consultants will prepare and deliver presentations on their findings and recommendations for one or more of the national-level stakeholder workshops. The Ministry of RO, in coordination with the consultants, will agree during project execution on the number, type, content and format of these presentations, as well as the time and place of their delivery.

B. Format and Presentation of Reports

5.3 Each report must be produced in both English and Dutch and submitted as (i) two printed and bound hard copies; (ii) an electronic file in a Microsoft Word-compatible format that contains the complete version of the respective reports (including, as applicable, executive summary, cover pages, table of contents, appendices, figures, graphics and tables); and (iii) an electronic file in PDF of each complete report. These reports and files should be sent to the PEU at the Ministry of Regional Development to the attention of the Project Officer responsible for this Component (see Section VI) within the time spans indicated in paragraph 5.1.

C. Payment Schedule

5.4 The consultant firm(s)[11] will be paid according to the following schedule: (i) 25% upon signing of the contract; (ii) 25% upon delivery of the Draft Report on Land Rights, Tenure and Use; (iii) 25% upon delivery of the Draft Report on Community Land Use Mapping; and (iv) 25% upon approval by the Ministry of Regional Development and the no-objection of the IDB of all delivered reports (initial, draft and final) and products listed in Section V.

VI. COORDINATION

6.1 Responsibility for the technical and administrative coordination for this consultancy rests with the Ministry of Regional Development (RO). The consultant firm or association of firms will coordinate their work with the relevant Project Officer in the Project Execution Unit (PEU) for the "Support for the Sustainable Development of the Interior" project. The consultants should be in regular contact with the Project Officer throughout the consultancy in order to provide informal updates on the progress of the work, and to discuss any issues that may need to be resolved for its successful completion.

[11] If the winning proposal was presented by an association of firms, the contract for the consultancy requires these firms to specify how the payments listed here will be distributed among the associated firms.

6.2 In addition, all members of the consultant team shall foster good coordination – and, where applicable, collaboration – with the consultants carrying out the activities financed by other Components of the TC, entities and stakeholders involved in the execution of this TC, thereby facilitating the delivery of high-quality products in an effective and timely manner.

ANNEX 9: MEMORANDUM ACT-GLIS

MEMORANDUM OF UNDERSTANDING (MOU)

I. PARTIES AND PURPOSE

This General Collaborative Agreement, hereinafter referred to as Memorandum of Understanding (MOU), is between the Project Management Unit GLIS, for Land Registration and Land Information System Suriname (PMU-GLIS), located at the Primulastraat # 1, Paramaribo, Suriname.

And

STICHTING AMAZON CONSERVATION TEAM SURINAME, hereinafter referred to ACT, located at the Nickeriestraat 4, Paramaribo, Suriname.

This MOU provides clearance and approval on an agreement between the PMU-GLIS and the ACT.

II. MISSION OF PARTNERS

The mission of the PMU-GLIS is to establish a spatial information infrastructure based on a legal framework and comprising of a spatial data system and a newly establish institution for monitoring and maintenance of the system, and to ensure and make available up-to-date spatial information all over the country for everybody to use.

The mission of the Amazon Conservation Team is to work in partnership with indigenous people in conserving biodiversity, health and culture in tropical America.

Whereas:

Parties have declared their interest to cooperate in providing reliable and actual spatial data for indigenous communities in the country.

This information flow that parties will provide, shall contribute to the development of the individual on the first place and for the different stakeholders.

V. OTHER TERMS AND CONDITIONS

This MOU defines in general terms the basis on which the Parties will cooperate, and as such, does not constitute a financial obligation to serve as a basis for expenditures. Expenditures of funds, human resources, equipment, supplies, facilities, training, public information, and technical expertise will be provided by each signatory agency to the extent that their participation is required and resources are available.

This MOU is not a fiscal of funds obligation document. Any activities involving reimbursement or contribution of funds between the Parties to this MOU will be handled in accordance with applicable laws, regulations, and procedures. Such activities will be documented in separate Support Agreements, with specific projects between the Parties clearly described. Each Party will provide funding for its own areas of responsibility, unless specified otherwise in a Support Agreement. The Support Agreement will reference this MOU.

This MOU in no way restricts the Parties from participating in similar activities or arrangements with other public or private agencies, organizations, or individuals.

This MOU does not obligate the Parties to expend appropriations or to enter into any Agreements, contracts, or other obligations.

CONFIDENTIALITY

All materials and information gathered by either party under this agreement are confidential. Such confidential materials and information may not be used under this MOU or thereafter in any way or divulged to any third party without the written permission of both PMU-GLIS and ACT. Both parties may not refer to the materials and information in any publicity, advertising, public document or publication without prior consent from either party under this MOU or thereafter.

CORE VALUES

Both parties shall comply with the other party's mission statement, core values and the rules set by the community in which the activities are engaged

VI. DURATION OF THE MOU, AMENDMENTS, OR TERMINATION

This MOU will become effective when signed by all the Parties. The MOU will remain in effect through April 2007 till April 2009. The PMU-GLIS and ACT will conduct a formal review of this MOU in at least one year, unless either terminated by (1) mutual written consent; (2) 30 days advance written notice by either Party, or (3) completion of the operation/terms of the MOU.

This MOU may be amended within the scope of the MOU, extended, or renewed at any time through the written mutual consent of the Parties.