

Inter-American Court of Human Rights
Case of Twelve Saramaka Clans v. Suriname

Affidavit of Dr. Peter Poole
Expert Witness

Submitted by
The Inter-American Commission on Human Rights
and
The Victims' Representatives

02 May 2007

CONTENTS

PAGE

I. GENERAL

1

A. Can you please state your credentials

1

B. Please state the basis for the information contained in this affidavit

1

C. Can you please explain how you came to assist the Saramaka people to make maps and aerial photographs of their territory and what this entailed

1

II. SARAMAKA TERRITORY

3

A. On the basis of the land use maps and aerial photographs produced by the Saramaka with your assistance, can you explain how the Saramaka occupy and use their lands, territory and resources (for instance, are they hunting, fishing, farming etc.)? Is this occupation and use of their territory extensive?

3

B. Did you determine that the Saramaka employ any specific rules and/or norms for managing their territory and its resources?

4

C. On the basis of your experience working with indigenous and tribal peoples in tropical forest environments, would you say that the Saramaka people's occupation and use of its lands, territory and resources is broadly consistent with a forest- and forest resource-dependent society and why?

4

D. Are there any other conclusions that you would draw from the map and/or aerial photographs that you helped the Saramaka produce that are relevant to assisting the Court to understand Saramaka land tenure and resource use, and their relationships to the forest?

5

E. On the basis of your experience, do the Saramaka people maintain spiritual and cultural ties to their lands, territory and resources and are there specific areas of their territory associated with religious or cultural practices? Were any of these areas identified on the maps you helped the

5

F. Why are there no boundaries marked on the map of Saramaka territory? Are the boundaries between the Saramaka and their indigenous and Maroon neighbours unknown?

5

G. Did you find any evidence that there any indigenous peoples or communities living within Saramaka territory?

6

H. Did you see any evidence of gold mining on the Upper Suriname River in the area that you assisted the Saramaka to map?

6

J. While you were in Suriname in 2004 did the para-statal nature conservation agency STINASU ask you to make some aerial photographs in Brokopondo District around the Bronsberg Nature Reserve? If yes, can you describe what you saw there?

6

K. Do you know if there are any of the so-called Saramaka transmigration villages in the same area as the Bronsberg Nature Reserve? What do you think the impact of such massive mining operations would be on the local human population and the fauna that they consume as part of their traditional diet? 6

L. The map that you helped the Saramaka produce shows part of the reservoir created by the Afobaka dam and you presumably flew over parts of this reservoir while making aerial photographs of Saramaka territory. In your opinion, and given what you know about Saramaka land tenure and resource use, would there be ongoing impacts caused by the flooding of Saramaka territory by the Afobaka dam and reservoir? 7

III. LOGGING ACTIVITIES IN SARAMAKA TERRITORY 8

A. Did you personally visit any of the logging concessions in Saramaka territory and if so which one and when? 8

B. Can you explain what you saw in the concession(s) and what conclusions you may draw concerning the environmental and social impact of the operations that you observed therein. 8

C. In March 2004, you presented a report on logging activities to the Inter-American Commission on Human Rights, which contained a series of photographs and maps. One of the maps overlays the logging concessions with the Saramaka land use map. Can you please explain what conclusions you draw from this map? 9

**Inter-American Court of Human Rights
Case of Twelve Saramaka Clans v. Suriname**

**Affidavit of Dr. Peter Poole
Expert Witness**

I. GENERAL

A. *Can you please state your credentials*

1. In short, I have worked for over 30 years with indigenous and tribal peoples on projects related to resource management and sustainable development. Over the last 15 years the focus of this work has shifted almost exclusively to training community-based teams in mapping their ancestral territories and in gathering the data needed to manage these lands. Much of this work has been done in tropical forest environments, including in the Guiana Shield region of northern South America (includes Venezuela, Guyana and Suriname). My CV has been submitted to the Inter-American Court of Human Rights.

B. *Please state the basis for the information contained in this affidavit*

2. I made 7 trips to Suriname between 1999 and 2004. Six of these were to Saramaka territory to assist the Association of Saramaka Authorities (VSG) to make maps of the Upper Suriname River Saramaka territory and to produce aerial photographs of Saramaka villages and the logging concessions within their territory. I also assisted the Association of Indigenous Village Leaders in Suriname (VIDS) to make maps of the indigenous territory on the Lower Marowijne River (1999-2001) and the Captain's Association of the Cottica N'djuka people to make a map of their territory in Marowijne District (2003-2006).

3. In addition to support focusing on mapping and resource management, I also conducted research in Suriname, including with the Saramaka people, on the relations between indigenous and tribal peoples and global conservation NGO's. In the case of the Saramaka, this focused on the now dormant plans to expand the Central Suriname Nature Reserve into Saramaka territory. This was of great concern to the Saramaka because nature reserves are by law the property of the State in Suriname and the Saramaka believed that expanding the reserve – at least when it was proposed in 2001-02 and because it would absorb some forty percent of their territory – would prejudice their efforts to obtain legal recognition for their land and resource rights.

C. *Can you please explain how you came to assist the Saramaka people to make maps and aerial photographs of their territory and what this entailed?*

4. In 1999/2000, I was invited by the Saramaka to train a community-based team of Saramaka mappers and to provide technical assistance to supervise the compilation and printing of a geographically accurate map showing how the Saramaka occupy and use their traditional territory. This included putting Saramaka place names on the map, showing where traditional resources were found or used, and showing some of the Saramaka's special places. It should be noted that these maps are not intended to

be prescriptive, but rather should be considered as works in progress given that funding was not available to complete all of the mapping work in the southern-most reaches of Saramaka territory (the Gaan and Pikin Rivers and into the southern watershed).

5. The aerial photography project emerged from discussions during the mapping project about the Saramaka's concerns about logging concessions and operations at the northern end of their Upper Suriname River territory. This industrial-scale development had caused considerable alarm and anxiety among the Saramaka and was happening before they could settle their territorial claims. They decided to focus first on the Tacoba and Ji Shen logging concessions and to document and analyse the impacts. Funds for the aerial and ground surveys were awarded by the National Geographic Conservation Trust. The resulting data was submitted to the Inter-American Commission on Human Rights during a hearing held in Washington DC in March 2004 and subsequently to the Inter-American Court of Human Rights as an annex to the filings of the Inter-American Commission¹ and the victims' representatives in this case.²

6. The aerial data-gathering was completed earlier than expected and I informed the Saramaka that there was still funding for one additional survey flight. They then asked that I photograph all the Upper Suriname River Saramaka villages from the air. The results were summarised with all villages represented in thumbnail prints arranged around a satellite-derived map of Saramaka territory to the south of the reservoir created by the Afobaka dam.³ This 'image-map' shows the relationship between Saramaka patterns of settlement and land use. In addition, each community received two high resolution 40MB images of its village lands and a close-up of the village itself.

7. The mapping project employed Global Positioning System (GPS) technology rather than a geographic information system which is not essential to the production of geographically accurate maps. GPS equipment is low-cost, rugged, and easily taught, and the methods learned by the mappers provide a platform for their later graduation to GIS-based analyses.

8. The mapping methodology used maximises the contribution that can be made in-community and is heavily based on community interviews and meetings. It consisted of three simple phases: 1) a base map was produced showing the river

¹ 'Maps I & II, submitted by Peter Poole to the Commission during public hearing (hearing no. 49, 119th Period of Sessions, 5 March 2006 [sic; 2004]', in *Annexes 14 & 15 to the Application of the Inter-American Commission on Human Rights*. See, also, 'Declaration of Dr. Peter Poole before the Commission', in *Annex 11 to the Application of the Inter-American Commission on Human Rights*.

² 'Map 1.2, Contemporary Saramaka occupation and use of the Upper Suriname River, Draft Map produced by the Association of Saramaka Authorities, September 2002, in *Annex 1.2 to the Brief containing Pleadings, Motions and Evidence submitted by the Victims' Representatives in the Case of Twelve Saramaka Clans versus the Republic of Suriname*, 03 November 2006.

³ 'Aerial photographs of Saramaka villages and traditional farming areas on the Upper Suriname River' (submitted to the I-A Court on 20 February 2007), offered as supporting evidence in paragraph 234(b) of the brief containing pleadings, motions and evidence submitted by the victims' representatives in the Case of Twelve Saramaka Clans versus the Republic of Suriname, 03 November 2006.

network in the target area; 2) the base map was then used to train the Saramaka mappers in legend-building (the Saramaka themselves decided what to include on the legend), how to use GPS, how to log map coordinates, and techniques for interviewing community authorities and members. The mapping team then start recording traditional occupation and use through a combination of interviews with holders of traditional knowledge and site visits to record map coordinates, all of which resulted in a map completely filled with Saramaka data. 3) In the final phase, the field data is entered on to a digital version of the base map and then the printed draft is returned to the mappers for final review at the community level, during which corrections are recorded. A final map is then produced.

9. The aerial photographs were taken with a 14 mega-pixel Kodak N14 camera that was connected to a GPS unit. The resulting images are annotated according to latitude and longitude (to an accuracy of about 15 metres) and are compatible with the requirements under Federal Rules of Evidence in the United States and Canada.

II. SARAMAKA TERRITORY

A. *On the basis of the land use maps and aerial photographs produced by the Saramaka with your assistance, can you explain how the Saramaka occupy and use their lands, territory and resources (for instance, are they hunting, fishing, farming etc.)? Is this occupation and use of their territory extensive?*

10. The maps, aerial photographs and satellite images conclusively demonstrate that the Saramaka intensively and extensively occupy and use their territory. The maps record that the Saramaka use their lands not only for farming, hunting and fishing, but also for gathering materials for canoe-making, building, crafts, and for medicinal purposes, among others. Some 34 items are listed in the legend alone, which indicates that there is extensive use of, and knowledge about, their territory. Indeed, the Saramaka have names for almost every geographical feature, including relatively small ones such as rocks, and almost all of these places are important landmarks in Saramaka history and culture.

11. As I noted above, the mapping was not completed in the far southern reaches of Saramaka territory – which was their historical heartland during their early days in the forest – and for this reason, the map does not fully reflect the full measure of Saramaka land use. The map legend also does not include many resources and other geographical features that could have been included, and I would say that the Saramaka were relatively conservative when deciding what to include on their map and they could have had 60 or more legend items.

12. The communities are also keenly aware of non-traditional uses of their lands, and the map records that at least 22 communities along the river were engaged in small-scale eco-tourism when the map was made. They are also aware of other ways to generate revenues through environmental services. For instance, during the mapping work, when they were asked to identify the attributes of the remoter parts of their territories, the mapping team listed (apart from the spiritual and historical values assigned to these areas): the potential of these upstream areas for future settlement, revenue generation from wilderness tourism, and obtaining funds for protecting

Paramaribo's water supply through the management of the headwaters of the Suriname River (i.e., keeping miners out of the area).

13. In some cases, the communities expressed serious concerns over increasing degrees of intensity of land use as well as the resulting increased distances between their villages and their agricultural areas. The validity of these concerns is reflected in the data that the Saramaka collected and which I gathered in the aerial photographs. In my view, the Saramaka are approaching, and in some areas may have already exceeded, the sustainable productive capacity of their lands. This is a function of both population density (due to growing population, greatly exacerbated by the arrival of the some of the displaced Saramaka on the Upper Suriname River in the mid-1960s) and the loss of land due to the Afobaka dam. The latter especially has caused severe problems for land and resource management among the Saramaka.

B. Did you determine that the Saramaka employ any specific rules and/or norms for managing their territory and its resources?

14. Yes, the Saramaka have extensive rules for managing their territory, most of which are grounded in their kinship-based land tenure system. By this I mean that the Saramaka clans are considered to be the primary owners of land in Saramaka society and membership in these clans is based on descent or kinship. Almost all of Saramaka land and resource management rules are framed in some way by this kinship-based tenure system. Because they are the authorities within the clans, the Captains exercise considerable authority with regard to land use and management decisions and they as the primary 'adjudicatory' and 'regulatory' authorities on these issues. This authority however is exercised with assistance from the 'councils of elders' that exist in each village and is tempered by the imperative to consult with clan members that have priority rights within clan lands.

15. Saramaka land tenure and management systems and rules are specifically adapted to their territory and are based on a long-term relationship and interaction with that territory. They are very effective in that context and are reinforced through numerous social and spiritual norms that govern Saramaka society and life. Because Saramaka population has increased in the past 30-40 years and because they lost a considerable amount of land when the Afobaka dam was constructed, their management systems are now strained, significantly in some cases (i.e., managing agricultural land and ensuring adequate fallow periods), and may require modification if they are to continue to be effective. As I said earlier, the Saramaka are extremely concerned about this and have already started discussing their options.

C. On the basis of your experience working with indigenous and tribal peoples in tropical forest environments, would you say that the Saramaka people's occupation and use of its lands, territory and resources is broadly consistent with a forest- and forest resource-dependent society?

16. Yes, the range of activities and level of dependence upon local resources is typical of indigenous communities throughout the tropical forests of the Amazon Basin and in South East Asia. It is clear that the Saramaka are heavily or almost exclusively dependent upon their forests for their food supply, their medicines, their building and roofing materials, and their canoes. Even though individuals and families

may be able to generate revenues from non-traditional resources, these are not regarded as substitutes; use of local material remains as intense as ever.

D. Are there any other conclusions that you would draw from the map and/or aerial photographs that you helped the Saramaka produce that are relevant to assisting the Court to understand Saramaka land tenure and resource use, and their relationships to the forest?

17. The most obvious conclusion relates to the intensity of Saramaka resource use rather than the practice. The tenure map provides place names and located resources: the aerial and satellite images illustrated the relative *intensity* of Saramaka resource use across their territory. These images confirm and quantify what the leaders of some Saramaka communities are already saying: that they should be contemplating new, upstream communities to relieve pressures upon downstream lands.

E. On the basis of your experience, do the Saramaka people maintain spiritual and cultural ties to their lands, territory and resources and are there specific areas of their territory associated with religious or cultural practices? Were any of these areas identified on the maps you helped the Saramaka produce?

18. Yes, they do retain strong cultural and spiritual ties. For example, there are numerous sacred sites in Saramaka territory, most of which the Saramaka chose not to record on their map for religious and privacy-related reasons. In fact, there are so many of these sites that it would have been difficult to record them all on the map. I would say that the Saramaka see their entire territory as a sacred space in one way or another and they are deeply spiritual. This is true for both the Christian and non-Christian Saramaka villages.

19. From discussions that I had with Saramaka from the villages that were forced to move because of the dam and reservoir, it is clear that they also maintain strong cultural and spiritual ties to the lands submerged by the dam. They feel a great sense of loss and pain because of the inundation of their sacred sites and burial grounds, and they are very worried about retribution by ancestral spirits. This is very evident in discussions with them and it was equally clear that this is one of their motivating factors now in working to ensure that their remaining land base will be protected.

F. Why are there no boundaries marked on the map of Saramaka territory? Are the boundaries between the Saramaka and their indigenous and Maroon neighbours unknown?

20. The purpose of the map was not to demarcate the boundaries of Saramaka territory, but rather to illustrate how they occupy and use their lands and resources. This is the reason that there are no boundary lines marked on the map.

21. In conversation, the Saramaka would refer to a neighbour's territory as 'across a specific watershed or river' and they were quite specific about the location of these inter-tribal boundaries. My impression was that these natural boundaries are not disputed by neighbouring indigenous or tribal peoples.

G. *Did you find any evidence that there any indigenous peoples or communities living within Saramaka territory?*

22. No, all the villages that I visited were occupied exclusively by Saramaka people. The closest indigenous communities are the Trio at Tepoe (Tepu), who live to the south of Saramaka territory. As I understood from the Saramaka, the Trio and the Saramaka have good relations and have an agreement that the watershed (formed by a mountain range) is the border between their respective territories.

H. *Did you see any evidence of gold mining on the Upper Suriname River in the area that you assisted the Saramaka to map?*

23. No.

J. *While you were in Suriname in 2004, did the para-statal nature conservation agency, STINASU, ask you to make some aerial photographs in Brokopondo District around the Bronsberg Nature Reserve? If yes, can you describe what you saw there?*

24. Yes, STINASU asked me to take aerial images of illegal gold mines along Witte Kreek in the Bronsberg Nature Reserve. On an earlier occasion STINASU had evicted a group of such miners, confiscated their gear, and imposed a fine. However, the miners were able to persuade a judge that there was no ‘cartographic proof’ that they were mining inside the Reserve, and they were allowed to return. In the case of Witte Kreek, I was able to make a series of stereoscopic images of the illegal gold workings that had completely destroyed the most popular white-water rafting river in Suriname. There was also a lot of small-scale mining around the reserve; in fact, most of the area was covered with miner’s pits and other evidence of either past or present mining activities.

K. *Do you know if there are any of the so-called Saramaka ‘transmigration’ (displaced) villages in the same area as the Bronsberg Nature Reserve? What do you think the impact of such massive mining operations would be on the local human population and the fauna that they consume as part of their traditional diet?*

25. Most of the displaced Saramaka villages to the north of the reservoir are in this area, and they all seem to be impacted in one way or another by the mining operations. There is extreme damage to water quality in the creeks almost all of which appeared discoloured and potentially unusable. There is also a very high probability that traditional game animals are very scarce in this area because of the ecological damage and also because the miners themselves are undoubtedly consuming bushmeat. Studies on mercury contamination in this area show that environmental mercury levels are thousands of times higher than the limits prescribed by the World Health Organization and this is a major health hazard, especially for the people living in the immediate vicinity.

L. The map and aerial photographs that you helped the Saramaka produce shows part of the reservoir created by the Afobaka dam. In your opinion, and given what you know about Saramaka land tenure and resource use, would there be ongoing impacts caused by the flooding of Saramaka territory by the Afobaka dam and reservoir?

26. Yes, certainly, and I have mentioned some of them above. The simple fact that the Saramaka people's territory was almost halved by the flooding is one of the most severe impacts. This severely disrupted their traditional land tenure and resource management systems and in some ways I would say that they have not yet recovered from this. This loss of land is also a direct cause of their present, insufficient land and resource base and the reason that the Saramaka are extremely worried about and discussing how to access additional farming and other lands. They are rightly concerned that their ability to subsist from what remains of their traditional lands and resources as it is becoming more and more fragile and uncertain.

27. Because they lost so much land and because their population has increased considerably since the 1960s, they have reached the limits of sustainable usage in some areas and with regard to some activities. I am only talking about the Upper Suriname River in this context and not about the displaced Saramaka villages in Brokopondo District. Farming, which is an essential and major part of Saramaka life and their means of subsistence, is perhaps the best example.

28. Almost of all the Saramaka communities I visited – and I visited many of them – complained that they are having to go farther and farther away from their villages to find farming land and that they have had to shorten the fallow periods between crops in existing farm lands in order to be able to produce enough food. This problem cannot be remedied by using fertilizers because of the inherently poor quality of rainforest soils. It can only be addressed by maintaining adequate fallow periods that allow the soil to recover and, at least in this case, having access to sufficient farming land that can be maintained on a fallow cycle of 20 – 30 years. In some villages, I was told that the cycle has been reduced to as little as 10 years and this is simply not sustainable because the soil cannot recover and crop yields will steadily diminish. As I said, the Saramaka are acutely aware of this and are actively seeking solutions.

29. I would also say that I was greatly impressed by how traumatic the flooding remains to the Saramaka today. They feel violated on a very fundamental level, and they speak about the flooding and their displacement with great emotion and obvious pain. They express enormous outrage that the graves of their ancestors and their sacred sites were desecrated. They are clearly deeply affected by the flooding even today and this was also true for the young people I met who were not even alive when the dam was built.

30. It was clear to me that the Saramaka's experience with the dam has much to do with why they are so anxious about the logging operations that took place on their traditional lands. They see this as yet another destructive intrusion into their homeland and perhaps the start of further losses of land that will eventually see their destruction as Saramaka and as a people who base their identity and existence on their relationship with their traditional territory. They explained this to me in no uncertain terms: their struggle to seek protection for their land rights and to control the logging

that had come into their territory is at its heart a struggle for their right to exist in all senses of the word. Their experience with the dam is thus very much part of how they see the logging operations.

III. LOGGING ACTIVITIES IN SARAMAKA TERRITORY

A. *Did you personally visit any of the logging concessions in Saramaka territory and if so which one and when?*

31. Yes, I visited the Ji Shen, Leysner and the Tacoba concessions. I saw them from both from the air and on the ground in 2003 and early 2004.

B. *Can you explain what you saw in the concession(s) and what conclusions you may draw concerning the environmental impact of the operations that you observed therein.*

32. The Leysner concessions were not being logged when I visited in 2003 and they were just starting to build trails and staging areas. Therefore, my comments are only about the Ji Shen and Tacoba concessions.

33. Logging had ceased in the Ji Shen concession for about one year before I inspected it in 2003. Logging has ceased in the Tacoba concession for longer than one year, but I am not entirely sure when Tacoba withdrew from the area. It was immediately apparent to me that the logging operations in these concessions were not done to any acceptable or even minimum specifications and sustainable management was not a factor in decision-making.

34. The major environmental impacts observable in the concessions concerned the construction of logging roads rather than the removal of trees. In both concessions, the road building was clumsy and destructive. In the Ji Shen concession it also lacked any sense of direction and the company had mistakenly extended its road into a neighbouring and dormant concession. The aerial photography, and related ground observations, showed that the roads had been badly built and did not have culverts where needed. This resulted in considerable 'ponding' (areas of standing water) alongside the roads. This ponding would undoubtedly have caused widespread forest destruction in the years after my visit, both upstream and downstream from the blockages in the creeks. The standing water was already fetid when I was there and I expect that it would be worse and much more extensive by now. This standing water will also render the land in that area useless for farming as the crops planted by the Saramaka need dry and sandy soils and will simply rot in sodden ground.

35. I also observed that a number of subsistence farms planted by Saramaka had been destroyed by the roads in the concessions. I counted at least six, including two that had been destroyed by a set of containers that the company apparently used as offices and sleeping quarters for laborers. There was a considerable amount of waste around these containers and there was an abundance of discarded motor oil and other contaminants throughout the concession.

36. The creeks that were blocked by the companies provided the only sources of potable water used by the nearby Saramaka communities and I received many complaints that they had to travel long distances to get potable water.

C. In March 2004, you presented a report on logging activities to the Inter-American Commission on Human Rights. In that report, was a series of photographs and maps. One of the maps overlays the logging concessions with the Saramaka land use map. Can you please explain what conclusion you draw from this map?

37. One of the main conclusions that can be drawn from the maps is that the Saramaka were extensively using the areas granted to the logging companies. The map shows numerous farms inside the concessions as well as hunting, fishing and gathering of a wide variety of forest products. If even a basic environmental and social impact assessment had been conducted in connection with these concessions, it should have resulted in a decision not to grant the concessions. I say this because the use and dependence of the Saramaka on these areas is so obvious and overwhelming that it would have been highly unlikely that a mitigation plan could have been developed that would have allowed the logging to go ahead while at the same time reducing or compensating for negative impacts on the Saramaka. It is a general rule of thumb that when negative impacts cannot be adequately mitigated, avoidance is the default option.

38. Another main and related conclusion is that the areas in question were/are clearly occupied and used by the Saramaka people and they were/are in possession of these areas. In most countries, when indigenous and tribal peoples are in possession of lands and resources, there is a legal obligation to respect their rights to the same lands and resources and to consult with them and seek their consent before issuing logging permits. This did not occur, and from my observation and by all accounts the Saramaka were treated badly by the logging companies and the government. This would be consistent with what I have seen and heard in other areas of Suriname, where indigenous peoples and maroons' rights to their traditional lands and resources seem to be routinely disregarded. This was certainly the case in the other two mapping projects that I assisted with in Suriname (the indigenous peoples of the Lower Marowijne River and the Cottica Ndjuka people).

Signed on the 30th day of April 2007,

Dr. Peter Poole