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A Pilot Study of the Gendered Socio-Cultural,
Socio-Economic, and Governance Issues in the
Kernahan-Cascadoux Community, Nariva

KINDLY RETURN TO
CENTRE FOR GENDER
AND DEVELOPMENT
STUDIES

by



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INTRODUCTION

The initial phase (two weeks) of the Gendered Study of the Nariva Swamp primarily focused on exploring various areas of study and the data gathering strategies to be used for the entire length of the research. Building upon the studies conducted in Kernahan and Cascadoux, the research team decided to first explore the varied domains and components of the research in these communities before proceeding to Plum Mitan and Biche.

This phase involved the negotiation of entry and trust of the project and researchers with the Kernahan-Cascadoux community. It attempted to develop an overall understanding of the socio-economic, biodiversity and governance-related issues with reference to the community which would inform further structuring of the evolving research process. In so doing this two-week phase contributed and laid the foundation for realizing the secondary goals¹ of the project.

In addition, through the establishment of research team-community relationships, a facilitator's training workshop and a community workshop, the project's primary goal² was addressed to some extent. The results of this phase should therefore be understood, pending validation and deeper investigation.

METHODOLOGY

Using a combination of research methods, which included participant observation, interviews, ethnography, and focused group discussions, the research team was able to gather the data in a period of approximately 12 days. It should be noted, however, that the participatory approaches used in the study were shared with community members, who were interested in helping in the data gathering process and community organization (through facilitators' workshop).

Interviews usually took place in the compounds of households through informal chats and discussions³ with members of the household and visiting

¹ To generate research data which incorporates a gender analysis and is derived from an interdisciplinary frame *and* To examine the scientific research approach to research and explore the means and possibilities of incorporating social, historical, political, and economic concerns into its research frame.

² To empower the communities and women of the Nariva Swamp through a greater awareness of the bio-physical environment and their relationship/knowledge of their resource base.

³ This method is a culturally-sensitive means of people being with each other, sharing, interacting and gaining trust in Trinidad. It is generally referred to as *liming*.

friends from the village. An adaptive style format was adopted to limit the obtrusiveness of the research as well as to afford the research process as wide a cross sectional view of issues within the village as possible. Interviews were usually conducted by the research team with specific questions about issues based on the interests of individual members of the team.

The *facilitator's workshop* was conducted by the research team and trained 12 participants (7 male, 5 female community youths) in the skills of conducting Participatory Rural Appraisal methods (e.g. Time Lines, Resource Use charts, Commodity and Benefit Flow charts, Activities charts, etc.). The trained participants were then used as community facilitators in the community workshop so as to negotiate the capacity of the community to work with the methods.

The *community workshop* brought together over 110 people (55% men, 45% women) from Cascadoux and Kernahan. Community facilitators were directly involved in dealing with small groups (about 15-20 people per group) to conduct various PRA activities. There were two male groups and two female groups, with males facilitating male groups and females facilitating female groups. Both male and female groups worked on activities charts and a combined resource use, commodity flow and benefit flow chart. Workshop participants were also asked to assist in developing gender disaggregated time lines to depict the community events of historical importance to men and women. This event also served as a forum to validate the village map which was developed by researchers through interviews.

RESULTS

Physical Characteristics

Topography

The Nariva Swamp is situated in the central portion of east Trinidad between 10° 20' N and 10° 30' N latitude, 61° 00' and 61° 15' W longitude (Bacon, *et. al.*, 1979). It represents the country's largest freshwater wetland with an area of about 15,000ha (Lal, 1993).

Nariva swamp consists of three main process components:

- a) The Catchment area-freshwater regime,
- b) The Swamp Basin- flooding regime, and
- c) The Nariva Cocal area – tidal regime (lagoon marine exchanges) (Bacon, 1996). As a result of these process components the Nariva Swamp has evolved its characteristic ecology and biodiversity. The flora

and fauna found in the Swamp have adapted to the seasonal changes in water levels that occur throughout the year due to the weather patterns found in Trinidad.

The Kernahan and Cascadoux areas are characterized by a mixture of elevated and low-lying lagoon areas, which are at sea level. The Kernahan area is divided into large blocks for rich planting. These areas are generally the lagoon areas surrounded by channels or waterways fed by the rivers flowing out of the Swamp.

The Cascadoux area is hillier than Kernahan and is also characterized by the presence of more trees than Kernahan.

Further research should attempt to develop a better understanding of the topographical constitution of Kernahan-Cascadoux, Biche and Plum Mitan in relation to the overall topographic information available on the Nariva Swamp.

Climate

Trinidad experiences two seasons, a wet and dry season. The Nariva area also has this weather pattern with small variations due to its location and vegetation.

Agricultural Resources

The following are a list of resources that are utilised in the Kernahan and Cascadoux areas:

Coconuts	Bodi	Cascadura	Crab
Mangoes	Hot Peppers	Canch	Cows
Rice	Ochro	Snakes	Ducks
Plums	Pumpkin	Agouti	Goats
Watermelon	Pigeon Pea	Caiman	Cucumbers
Tomatoes	Birds	Chive	Celery
Buffaloes			

History

Since most of the residents in the area are primarily migrants from neighboring towns e.g. Penal, Debe and Rio Claro, their memory of the place goes back to the year they migrated to their current place of abode. Generally, both men and women in Kernahan and Cascadoux unfold the history of the place in terms of environmental change and infrastructure development in the area. Women, however, tend to remember migration patterns (i.e. how a group of people came in one after another from Penal to Kernahan in the 1965) and the difficulty they had in clearing and walking through the lagoons more than men do.

Women, likewise, tend to remember changes in the area in terms of access to such services as road development as it relates to their increased capability to move goods from the villages to the markets. Men, however, tend to remember the events in terms of infrastructure projects implemented in the area (i.e. length of time in building roads and agricultural assistance) more than women do. In attempting to deepen an understanding of the history of these communities, an important activity for consideration would be investigating the reasons why people migrated to these areas.

TIME LINE

Year	Women	Men
middle of 1960s	<p>Mud roads leading to the hills of Kernahan. The lagoon had a lot of trees and snakes. Women carried children and goods over their heads.</p> <p>Clearing of the lagoon began. Gardening and fishing were explored as means of livelihood. Some tried to raise some animals.</p>	<p>Bush, forest. Mud roads leading to Cascadoux and Kernahan. Approximately about 10 houses in the area.</p> <p>People started planting, some fished.</p>
1970s	<p>Some tried planting more vegetables in their gardens (i.e. tomatoes) and to raise more animals.</p> <p>A big typhoon came, which toppled many houses and destroyed many gardens.</p> <p>The government started paving roads making it easier for residents to carry their products</p>	<p>The government started building roads. (Note: Roads took about 15 years to complete. Gov't had to stockpile and harden the road foundations) More houses were built.</p> <p>Marjuana plantation in the swamps became one means of living for some residents.</p> <p>A big typhoon came toppling many houses in the area.</p>

	to markets such as Sangre Grande and Mayaro.	
1980s	Gravel roads were being built, however, the village is still without electricity and potable water source.	Two young people from Cascadoux won an award for agriculture. Village council in Cascadoux was organized. Improved surveillance strategies (i.e. use of helicopters) by the government curtailed many attempts at marijuana plantation.
1990s	Better roads enabled more cars and taxis to enter the area providing better transportation services for those going to school and to the market.	Unification of Kernahan and Cascadoux into one village. Hence, a new village council was organized. Oil exploration in Cascadoux. Small eruptions appeared around the area of the mud volcano that was associated with the oil exploration. In 1998, duck raising was introduced by the Community Development Fund as an alternative livelihood in Kernahan and Cascadoux to help alleviate poverty in the area. Ban on the entry of fishers in the swamp.

Socio-Cultural Dimensions

Household Dynamics

Household Composition

Generally, the families in both Cascadoux and Kernahan are made up of nuclear families (e.g. mother, father and children). There are cases, though, of extended families either run by a matriarch or a patriarch (i.e. may include a two or more nuclear families in one household, grandparents or a nuclear family with a grandparent and a few cousins)

Settlement Pattern

Many of Kernahan's residents have land and/or houses in areas such as Penal and Rio Claro. In some cases, the houses in the villages of study are considered but camp shelters while attending the gardens, fishing, or gathering conchs in the forests. Hence, as one goes through the village, some houses appear empty. Some who choose to live permanently in the Kernahan and Cascadoux, however, often keep an alternative house in

other towns of Trinidad. It should, however, be noted that residents of Cascadox appear to live in the area in a more permanent basis. A statistical breakdown of these patterns would be useful.

In both Kernahan and Cascadox, households tend to cluster in family groups. Further research is required to investigate whether settlement is also based on religious associations.

Daily Life Pattern

For women daily patterns are determined by whether it is market day or not. The men's, on the other hand, are guided by fishing, crabbing or conch gathering schedules. Women and men agree that working in the water (e.g. conch collecting and cascadoo fishing) is hard work as there is the threat of snakes, alligators and leeches.

Men added mosquitoes, ants, scorpions, sand flies and jackspanias were a problem when in the forest. In cases when they are met by such threats as snakes and alligators, their survival and livelihood come first. Hence, most often killing the reptiles is part of their livelihood process.

On the other hand, women have expressed that the time demanded by gardening is the most burdensome of their productive tasks. This is not to mention how they feel about molding, picking cucumbers and pumpkin, bending and looking for *Corellis*, cleaning chip chip, and scratching caused while picking Ochro.

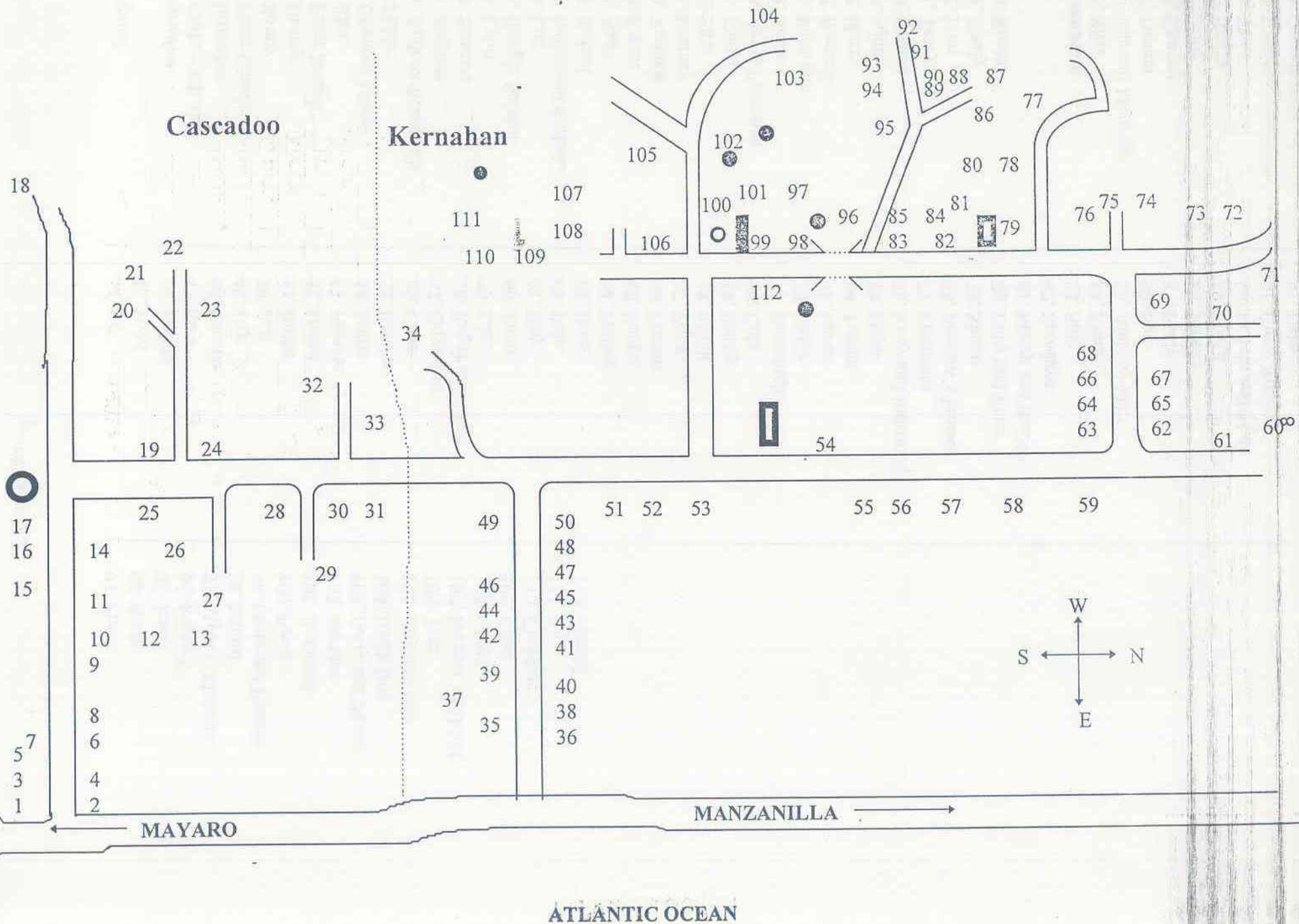
Daily Activities of a Man in Kernahan or Cascadoo.

TIME	ACTIVITY
5.00 a.m.	Wake up
6.00 a.m.	Spray, clear land, mold or go fishing
11.30 a.m.	Sleep
3.00 p.m.	Back to the garden to spray and mold
6.00 p.m.	Return home from gardening and fishing
8.00-9.00 p.m.	Go fishing (If going fishing at this time the fisherman would have returned from the day's fishing at about 3.00 p.m.)
9.00 p.m.	Bedtime

N.B. Further research would attempt to distinguish between men who rely on gardening and men who fish. In addition, activities such as eating, getting dressed, relax, etc. would have to be incorporated to define a more detailed picture of men's activities.

Daily Activities of a Woman on a Market Day.

TIME	ACTIVITY
5.00 a.m.	Wake up, brush hair and teeth
5.30 a.m.	Leave for market by taxi
6.30 a.m.	Arrive at Rio Claro Market
5.30 p.m.	Do shopping
6.00 p.m.	Leave market
7.00 p.m.	Arrive home, relax
8.00 p.m.	Fetch water
8.05 p.m.	Bathe
9.05 p.m.	Prepare food
9.35 p.m.	Eat
9.50 p.m.	Finish eating, brush teeth
9.55 p.m.	Bedtime



Legend

Cascadoo

1. Carlton Charles
2. Stretcher
3. Peter Charles
4. Sonny
5. Honey
6. Peter Joseph
7. Rita
8. Clement Morel
9. Fishie
10. Andrew Mansingh
11. Anginie
12. Samson
13. Lyon
14. Bongie Sabrina
15. Lisa
16. Indira and Serbida
17. Robert
18. Azad
19. Karen
20. Twinkle
21. Rodney
22. Silvi
23. Kums
24. Arvin Prematee
25. Sona
26. Papa son
27. Bonard
28. Harry
29. Ajim
30. Chanie
31. Terry
32. Ivan
33. Cindy
34. Rosie

Kernahan

35. Silvi
36. Tat and Maureen
37. Douen
38. Chapsu
39. Tube
40. Radha
41. Toro
42. Boyie
43. Cutnez

44. KC
45. Fowl
46. Bobby
47. Mev
48. Sancho
49. Dry
50. Ace
51. Bullet
52. Dread
53. Frankie
54. Eddie
55. Rambo
56. Celia
57. Guyanese
58. Roger and Lena
59. Lila
60. Toco
61. Doy
62. Batz
63. Boss
64. Fatboy
65. Banga
66. Pretam
67. Pope
68. Mohit
69. Bobby
70. Cola
71. Ramsingh
72. Kagie
73. Malik
74. Tamba
75. Doya
76. Kelly and Indroutie
77. Premnath
78. Andrew's house
79. Simon
80. Polly and Peter
81. Marry and Ruddy
82. Samdaye
83. Solo
84. Suresh
85. Andrew Man
86. Son
87. Pauly
88. Meena
89. Shiela
90. Mervin and Mala
91. Curry Rochan
92. Usha

93. Frank
94. Rudy
95. Jenny
96. Ramesh
97. Myboy, Molosin
98. Milord
99. Mola and Pamela
100. Pincho
101. R. Grand
102. Sheldon
103. Betty and Safrey
104. Black Boy
105. Roy and Lisa
106. Tara
107. Fatman and Molly
108. Chach
109. Chan
110. Christine
111. Raj
112. Harold

Daily Activities of a Woman on a Non- Market Day

TIME	ACTIVITY
5.00 a.m.	Wake up, brush teeth and hair
5.30 a.m.	Cook
5.50 a.m.	Send the children to school
6.20 a.m.	Go to the garden
7.20 a.m.	Arrive at the garden. Pick Bodi, Caraille weed e.t.c.
7.30 p.m.	Leave garden
8.30 p.m.	Arrive home, remove shoes, relax
9.50 p.m.	Fetch water
9.55 p.m.	Bathe
10.55 p.m.	Prepare food
11.25 p.m.	Eat
11.40 p.m.	Finish eating, brush teeth
11.45 p.m.	Bedtime

Both women and men have long working days, twelve to fifteen hours on the average, with men managing to have time for liming, leisure and relaxation. The additional burden of caring for children, fetching water and preparing food are women's responsibilities. Hence, while women generally take an hour or so for relaxation, they are devoid of liming and leisure time. While some men argue that they are involved in childcare, it appears to be when the women are out or busy and not when women take the time to relax. Hence, childcare by women is of greater importance than the relaxation of women from men's perspective. Although women cope with this they have expressed preference for a more equitable division of labour in the household. It should be noted, however, that older women are more accepting of greater burden in the household for women than are younger women.

Division of Labor

Generally, both women and men carry out productive tasks. Both engage in gardening (i.e. watermelon, bodi, ochro, cucumber, pepper, caraille), in the fish, crab and conch trade (although in different phases of the process) and digging for chip-chip. Further research needs to enlighten the gender division of labour in this important livelihood activity. In addition, men hunt agoutis, run taxis and work for the government. On the reproductive end, men see themselves as sharing the reproductive tasks of preparing

tea/coffee, cooking, laundry, water collection, cleaning the house (young men) and yard and taking care of the children. Women, however, see these tasks as primary responsibilities carried out by women with men, generally contributing to the cleaning of the yard and childcare when productive tasks and relaxation periods do not hinder them to do so. Community participation (i.e. attendance to religious and village meetings, youth activities, and engaging in sport activities) is from both sexes.

Eating Pattern

Both men and women eat the crops and aquatic food they harvest. They often have three meals a day. Breakfast and dinner are more likely to be had in their homes whereas lunch either at home for women or at their gardens or in the forests for men and women at work. During meals, however, it becomes a norm for older people (both women and men) to be served first before the children, men, and women ---- in that particular order.

Household Support

Economic support for households normally comes from a fellow resident of the villages in the marketing of gardening produce or forest catch. Often, a fellow village member, usually a woman, serves as a middle person in the marketing of products. This observation needs to be further validated. While many residents see their neighbours as competition in terms of fish or conch catch, they are not perceived as competitors in the market. Hence, men, for instance, selling the same produce or catch will often be seen side by side in markets and pushing to sell each other's catch.

While many villagers perceive that the pursuit of socio-economic development in the area is done independently by each household, support from extended family members and affiliation to religious groups (i.e. Pentecostal Church) provide some degree of social assistance. This happens for different reasons and through various arrangements which exist within/out the community. For example, daughters may flee their drunken husbands to find shelter in their parents' home or in some cases some wives need another person to talk to.

Access to Resources

Both men and women in Kernahan and Cascadoo have access to the natural resources in around the swamp. However, women do not go with the men who go fishing deep in the swamps. Economic resources are available to either sex who works for it but the extent to which this occurs based on gender would need to be investigated.

Access to Credit

Households needing financial support for agricultural purposes can access credit from the Agricultural Development Bank. Many of those who have availed of the services of the Bank have engaged in duck raising. One resident availed of the credit for Bodi gardening. A gendered statistical breakdown of this factor would be useful.

Forms of Savings

Money earned from selling products, which are in excess of what has been used for the procurement of household supplies, often serve as family savings for emergency purposes.

Social and Institutional Networks Providing Access to Other Social and Material Resources

The village's linkages with various government institutions provide them access to services such as adult literacy and ecotourism training. Material support is, likewise, offered by government agencies in terms of loans for agricultural projects and income from serving as forest fire patrol. The non-government organizations, on the other hand, also provide opportunities for non-formal education to village residents. Other private individuals have also extended material support in the form of food, clothing, and other goods to some residents of Kernahan and Cascadoo. It is hoped that the ongoing research will attempt to understand the historical relationships between the community and the intervening external agencies.

Health

Villagers generally have access to health services from public institutions in towns like Mayaro and San Fernando. Common remedies for various

illnesses are bought from pharmacies after selling their produce in the markets.

Among the disabilities identified is the Down Syndrome. On the other hand, researchers have observed a prevalence of the skin disease (lota) among the residents of the area.

Much more research is however required to discern the incidence and prevalence of Down Syndrome, Diabetes, Hypertension and intestinal-related diseases.

Education

Literacy level in the villages of study is rather low. Adolescents get support for study from their parents until a certain level of secondary education and rarely beyond that. Although education is desired by many it seems to elude many residents for lack of financial resources to pursue higher education.

Religion

When people came into the swamp, many were predominantly Hindu. Presently, the main religion for many is Pentecostal. There is, however, a neighborhood of those who follow Hinduism in the area who share a Sai Baba temple with a few Moslems in Kernahan.

A rift among Pentecostals caused the local church to split into two factions. One is now situated in the original Pentecostal building on the western side of Kernahan and is led by the son of a leading matriarch in the village. The other faction is based in a newly built Church on the eastern side of the village. The latter group is with Texan missionary funding and is led by a pastor who lives in Rio Claro.

Belief Systems

The researchers were able to cull out some beliefs:

It is believed by these villages as well as those in other parts of the country that any person who eats Cascadoo will return to die in Trinidad.

An old woman who lives alone and rather isolated from the village is perceived to be a soucouyant (witch).

Men in the village believe that a stone (commonly known as a thunderstone) comes with a lightning bolt that strikes down trees and houses. Years after, the stone will surface. The stone is a small smooth, dense rock that looks like a primitive axe.

Artifacts that are not commonly used in the village are being discovered in the swamp. A villager thought it was from another world while another thinks it is from the Carib tribe who settled and used the swamp.

Ground *Bois canot* root, a mixture of baking powder and lime, and an ammonia mixture are three types of anti-snakebite medicine used. the incidence of snake bites in the community needs to be further explored.

Socio-Economic

Gendered Resource Use

Resources of economic importance in the Kernahan and Cascadou areas are:

1. Land

This is used as the general dwelling area for the inhabitants' of the Swamp. Some homes are temporary while others make the Swamp their permanent abode. Different areas are used for agricultural purposes such as planting, rearing of livestock and aquaculture. Many of the inhabitants also venture into the inner areas of the swamp for fishing, hunting and crop cultivation. The acreage of land used for housing, agriculture, etc. as well as the areas controlled by households, men and women of the community are significant areas for further research.

In order to farm these areas the people have cut large expanses of the natural vegetation. Even though they are aware of the importance of maintaining a balanced environment when it comes to a choice of land use for agriculture as their only source of income versus the saving of the environment, their livelihood comes first. One farmer has cut as much as 35 acres of land for cultivation.

Crop cultivation in both Kernahan and Cascadou is shared among the members of the family (men, women and children). The men generally oversee land preparation; however, there are occasions when the women assist. The women mainly do planting, spraying, harvesting and marketing of produce, however, men do at times assist with this.

Monies generated from the sale of short-term crops are controlled and utilised by the women. Short-term crops cultivated are; bodi, ochro, tomatoes, cucumbers, hot peppers and dasheen. Where crops such as watermelon, rice and pumpkin are cultivated the men generally have control over all income generated as these are high-income earners. The entire family unit is therefore involved in income generation to varying degrees depending on the crop and the availability of time.

Fishing is an activity that is performed mainly by the men, particularly fishing in the inner regions of the swamp. Women tend to fish in the channels surrounding their homes, although there are some women who enter the inner regions to fish as well. Fishing is a time consuming activity and many of the fishermen tend to spend 3-4 days camping in the swamp to obtain a suitable size catch to market. Others go into the area early morning and late at night everyday.

Storing of the Cascadura is done by the men in ponds either in the swamp or in small ponds next to their homes. Species caught are Cascadura, Conch and Crabs. Cascadura, which is another high-income earner, is generally marketed by the men in the major markets, such as Chaguanas, Tunapuna, Sangre Grande, Arima and San Juan. Roadside vending is primarily a female activity and is done along the Manzanilla/Mayaro Road although some do go to the markets to sell their Cascadura.

Decision-making is usually shared by both males and females. Decisions regarding how crops are grown and used are shared between the males and females. The money earned from the sale of short-term crops is spent by the women on household necessities such as, food, clothing, transport, school expenses and reinvestment in the land, such as the purchase of planting material, fertilizers and other chemicals. Whatever money is left is put towards savings. Money earned by the men from watermelon, rice and Cascadura is reinvested into the land, farming machinery, purchase of alcohol and some is given to the women for household use.

Animals such as ducks and small ruminants are grazed on the land for sale at the farm gate. Buffalo are used for transport, while cows are reared for milk production for home use and also the making of butter, ghee and dahee. Ducks are also grown for both home use and sale. The women and children supervise all of these activities.

2. Water

Water is used from the rivers and channels in the area for bathing, cooking, drinking and crops. There is also a water tank in the area, which is filled with pipe borne water that is used for cooking and drinking. The collection and use of water is mainly done by women. In some cases the men do the watering of crops. Water is also collected from the channels for the storage of the Cascadura.

3. Other

Other resources in the Swamp such as Tree Crops, birds along with other existing flora and fauna are also utilised to some extent by the inhabitants either for use in the home or for sale. As the research progresses, a more comprehensive listing of these resources (e.g. species of trees, birds, etc.) will be developed.

Resource Use - Male Perspective

Resource	Source	Purpose	Is it stored	Who Stores it	How Is it stored	Commodity flow	Who decides how it is stored	Who sells it	What is the cash used for	Who decides where it is spent
Rice	Rio Claro demonstration centre	selling	yes	M & F	Bags or Rice Box	Land preparation (m), Broadcast seeds or Prepare nursery (m), Prepare banks for holding water (m), fertilizing & spraying (m), harvest (m) transport to national flour mills for sale (m)	M & F	M	Groceries, clothing, School, household, Agro suppliers for watermelon	M & F
Coconut	Estate	Sale, brooms, oil, branch for cascadura string, water nuts	yes	M&F	In a cool place	Waternut- picked & sold to retailers (m & w) Dry nuts- making oil & cooking Branches - brooms (w)	M&F	M & F	Same as above	M & F
Ochro	Agro shop	selling	yes	M&F	baskets	Planted, picked, market or consumed at home or wholesale at home (m & f)	M&F	M & F	Same as above	M & F
Hot peppers	Agro shop or house Hold	selling	yes	M&F	Buckets Bags	Picked (m & f), put in bags(m & f), Market (m & f) (wholesale & retail), households. Domestic use -cooking (W)	M&F	M & F	Same as above	M & F
Water Melon	Agro shop	selling	yes	M	Shed in a cool place	Plant (m), maintenance (m), harvest (m), market (m), wholesale and retail (m)	M	M & F	Same as & savings	M & F
Crab	Man-grove/ Casca doux	Selling eating	yes	M	Ply box	Bamboo traps are set(m), crabs collected (m), market (m), roadstall (m), wholesale (m)	M	M	Groceries & recreation	F
Conch	Bush bush	Eat and sale	yes	M	Tubs & bags	Set traps (m), collect conch (m), Market (m), household	M	M & F	Same as & savings	M & F

Resource Use - Male Perspective

Resource	Source	Purpose	Is it stored	Who Stores it	How Is it stored	Commodity flow	Who decides how it is stored	Who sells it	What is the cash used for	Who decides where it is spent
cascadoo	Bush bush Pt. Cascadoux	Eat sale & rearing	Yes	M & F	Ponds	Caught with cast nets or traps (m), stored (m), transported (m), market (m), sold to household (m)	M & F	M & F	Same as savings	M & F
ducks	Agro shop Relative	Sale, eat	Yes	M & F	In open areas	Bought, fed (m&f), cooked at special occasions (f), sold (m&f)	M & F	M & F	Same as savings	M & F
pumpkin	Agro shop	Sale, eat	Yes	M & F	In sheds on grass	Plant (m), maintain(m), harvest (m), stored (m) transported (m) market to wholesaler and retail (m)	M & F	M & F	Food school maintenance	M & F
bodi	Agro shop	Sale eat	No	F		Planted (m&f), picked (m&f), transported (m&f), sold to householder (m&f).	M & F	M & F	Food clothes shelter school	M & F

Resource Use - Male Perspective

Resource	Source	Purpose	Is it stored	Who Stores it	How Is it stored	Commodity flow	Who decides how it is stored	Who sells it	What is the cash used for	Who decides where it is spent
sheep	Bought	Sale home	Yes	M & F	pens	Bought , reared, sold , cooked (f)	M & F	M & F	Ropes groceries medicine clothes	M & F
goats	Bought	Sale home	Yes	M & F	pens	Bought , reared, sold , cooked (f)	M & F	M & F	Ropes groceries medicine clothes	M & F
cows	Bought	eat sale	Yes	F	Gallons in ice	Family use	M & F	M & F	Investment household	M & F
buffalo	Bought	transport	Yes	M & F	pens		M & F			
Chip chip	market	Eat sales	yes	M & F	ice	Collected (f) sold (m & f) cooked (f)	M M & F & F	M & F	groceries	M & F
celery	market	eat	no	M & F				M & F		M & F
chive	market	eat	no	M & F				M & F		M & F

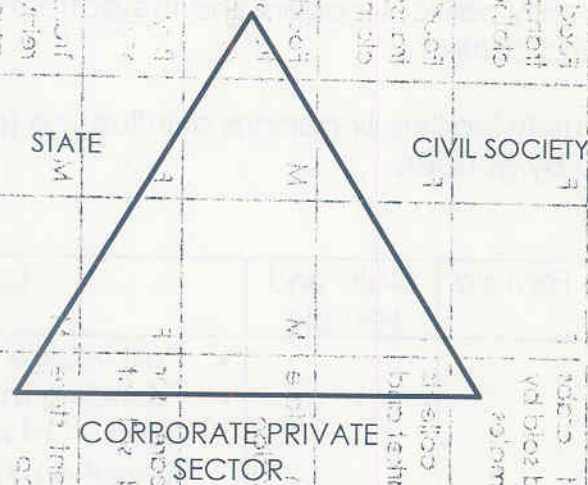
Resource use – female perspective

Resource	Source	Purpose	Is it stored	Who Stores it	How Is it stored	Commodity flow	Who decides how it is stored	Who sells it	What is the cash used for	Who decides where it is spent
Rice	Rio claro farm cascado	Sell home use seeds	Yes	F	bags	Planted (m & f) harvested (F) stored (f) transported (f) sold (f)	F	F	Reinvest in land pay Workers food chemicals loan payments	F
Coconut	Kernahan	Sale drink Making oil cooking	No it gets sour	M & F		Picked (m & f) transported, sold at farm gate, and POS cooked (f)	F	F	Food savings clothes school liming	F
Ochro	Agro shop	Sell home use	Yes	F	Boxes baskets	(m & f) prepare land , plant Maintain and harvest. (f) transport to market & sell sangre grande, chaguanas,	F	F	Food savings clothes school	F
Hot peppers	Agro shop	Sell home use	Yes	F	basket	m & f) prepare land , plant Maintain and harvest. (f) transport to market & sell	F	F	Food savings clothes school	F
cucumbers	Agro shop	Sell home use	Yes	F	Heaps on ground	(m & f) prepare land , plant Maintain and harvest. (f) transport to market & sell sangre grande, chaguanas, POS arima	F	F	Food savings clothes school	F

Resource use – female perspective

Resource	Source	Purpose	Is it stored	Who Stores it	How is it stored	Commodity flow	Who decides how it is stored	Who sells it	What is the cash used for	Who decides where it is spent
Water melon	Agro shop	Sell home use	Yes	F	Cool place	Men prepare land, maintain crop harvest, transport and sell to wholesalers and retailers	M	M	Savings house repairs, reinvest in land	F
crab	Mangrove, bush bush	Sell home use	Yes	F	Barrels Crab box	Set traps (f) collect crabs transport to market and sold by females. Cooked by females	F	F	Food transport clothes	F
conch	Bush bush	Craft Sale Home use	Yes	F	Barrels wooden boxes	Family sets traps , collects conch transports to market and sells	F	F	Food transport clothes	F
cascadoo	Swamp rivers channels	Selling home use	Yes	M & F	Ponds and boxes	Mainly men catch store transport and sell cascadoo	M	M	Food transport clothes	M & F
ducks	farm	Sale home use	yes	M & F	pens	Women buy and care for ducks transports and sell at market or farm gate	F	F	Buy feed savings	F
Pumpkin	Agro shop	Sale home use	yes	M	sheds	Men prepare land plant store harvest and market crop	M	M	Transport reinvest in crop pay workers savings	M
bodi	Agro shop	Sale home	yes	F	Cool place	Women prepare land , plant maintain harvest market crop	M & F	M & F	School food	F

Governance Triangle for the Cascadoux-Kernahan Community



State:

- Ministry of Agriculture, Lands and Marine Resources (Forestry Division, Wildlife Section, State Lands Division, Drainage Division, Rio Claro Demonstration Station)
- Ministry of Social Development;
- Environmental Management Authority;
- National Wetlands Committee;
- Institute of Marine Affairs;
- Youth Training Entrepreneurship and Partnership Programme, Ministry of Sports and Youth Affairs;
- Ministry of Planning;
- Mayaro Regional Corporation;
- Tourism and Industrial Development Corporation

Civil Society:

- Pointe-a-Pierre Wild Fowl Trust;
- Caribbean Network for Integrated Rural Development;
- Centre for Gender and Development Studies, UWI;
- UWI (Department of Zoology, Botany, Agricultural Economics, Soil Science)
- Island, Sustainability, Livelihood and Equity Programme;
- Canadian International Development Agency.

Private:

- Discovery Tours;
- South East Eco-Tours
- Amoco Trinidad Ltd.

Community Governance

The pilot study⁴ of governance in the Cascadoo-Kernahan community was conducted with the aim of providing a preliminary understanding of power relations between community political leaders and the patterns of community partnership and conflict.

i. Identification of community leaders or persons of influence (poi) and their spheres of influence by gender.

Persons of Influence	Male	Female	Male and Female	Locus
1. Azad	X			<ul style="list-style-type: none"> • Past Village Council Leader; • Founding member and 'reviver' of the Cascadoo-Kernahan Village Council; • Community Mobilizing Agent (goes around notifying people of meetings, motivates people to participate, fosters intra-community participation, organizes); • Prime organizer for eco-tourism project; • a leading male figure in the community; • member of Nariva Environmental Watch Society (NEWS); • Liaison between the Forestry Division (Wildlife Section) and the Community.
2. Samdaye		X		<ul style="list-style-type: none"> • Major influence in Pentecostal Church 1 (composed of her family block over which she is the head); • Matriarch over 3 generation-

⁴ This pilot of governance was only able to touch the community systems of self governance (i.e. maintenance and internal legitimization of structure and relations). A more prolonged and deeper research inquiry is required to understand the systems of Gendered resource governance.

					family; <ul style="list-style-type: none"> A key contact for university researchers re: food preparation and interaction.
3. Celia		X			<ul style="list-style-type: none"> Assistant Pastor of Pentecostal Church 2 (largest religious segment of the community), Her daughter teaches the village school; Interacts with external religious influence.
4. Butts		X			<ul style="list-style-type: none"> Current village council president; Not viewed as very competent/influential (Picong from his fellow male partners); Responsible for lobbying for villagers electricity access.
5. Pamela		X			<ul style="list-style-type: none"> Youth leader; Secretary of NEWS; Part of mobilizing group; Fire warden; Contact/liaison between wildlife and community.
6. Videsh		X			<ul style="list-style-type: none"> President of NEWS; Fire Warden; Part of eco-tourism; Community Networking.
7. Mylord/Rona			X		<ul style="list-style-type: none"> Provide meeting spot.
8. Harry		X			<ul style="list-style-type: none"> Former village council-leader.
9. Leena/Roger			X		<ul style="list-style-type: none"> Tried to motivate other families to practice agriculture for commercial subsistence; Lent farmal (tractor) to community people with intention of 'making

⁵ External meaning 'non-community'.

10. Daughter	X	Organizers Sai Baba activities;	Acts as village's Sai Baba leader.
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Persons with influence in the Cascadoo-Kernahan community seem to come mainly from the Kernahan area. Out of the 10 persons identified who exert some degree of influence in the community, there appear to be equal numbers of males and females (4 each) while in two instances couples (husband and wife) appear to exert some level of influence over a social group.

Males however tend to exert influence with regards to overall village affairs, being designated and legitimate heads of organizations in the village such as the village council (the village council has undergone three leaders, all male). See nos. 1, 4 and 8 in table. In addition, they seem to occupy the 'headship' of community youth recreation and advocacy groups such as the Nariva Environmental Watch Society (NEWS) (see no. 6), as well as influence the workings and organization of these groups.

Since according to Mahy (1997)⁶ the main goal of the village council appears to be the upgrading of the standard of living of the community, it could also be linked to the notions that males:

1. Occupy/have influence in groups that seek to secure basic material needs e.g. amenities/infrastructure on behalf of the community, and;
2. Occupy political spaces that facilitate legitimate and require interaction and negotiation with external stakeholders' e.g. regional government authority. Males probably see themselves as the *intercessors* of the community re: *material development* e.g. the male village council president is responsible for investigating and lobbying for access to electricity with the regional government authority.

Some men also see their roles as leaders being that of communication, e.g. notification of the community about community meetings, etc. This could be related to their relative freedom of mobility within the community and the established '*friendship networks*' forged through their cultural past time of 'liming'.

Women, on the other hand appear to be leaders of non-material, especially religious culture within the community (see nos. 2, 3 and 10 in

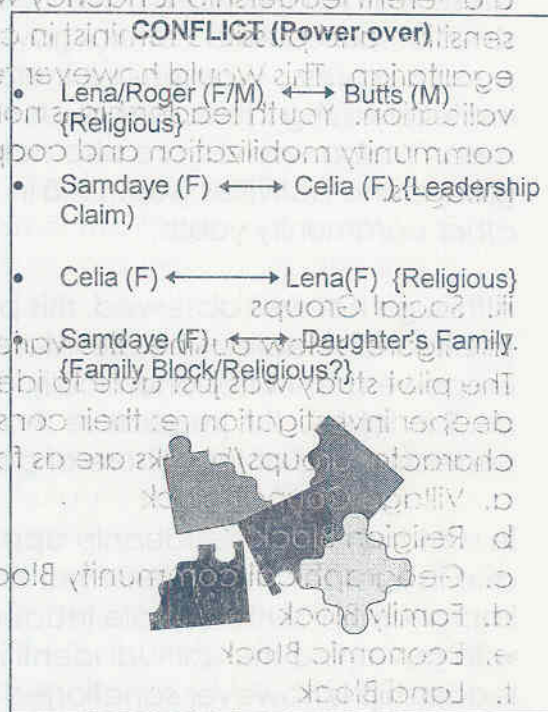
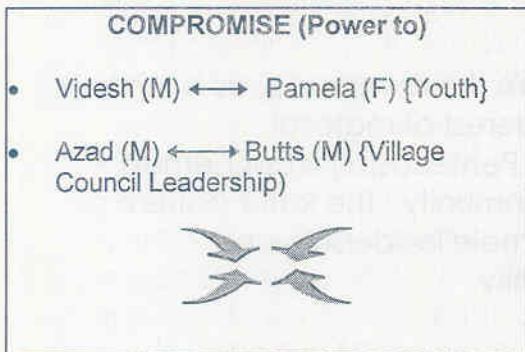
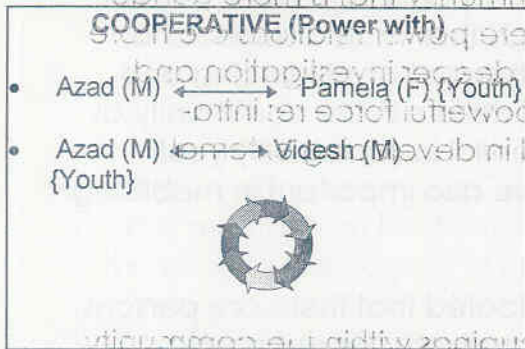
⁶ Mahy, Maryse. 1997. Feasibility of Co-Managing a Wetland of International Importance: The Case of the Nariva Swamp, Trinidad. Masters thesis, Dalhousie University, Canada.

table). In all cases, the women are the village representatives/assistants of external male leaders who are regarded as the prototype religious leaders. These women therefore have influenced over propagating/protecting the styles of spiritual and cultural governance, which their male pastors, and pundits profess. Women are therefore as much a part of influencing and institutionalizing ideologies of identity (self) and culture in the community as men. Young women are also active and influential in community youth groups and activities (see no. 5 in table) and are also important in mobilizing other community youth. Although not well observed, this pilot study indicated that there are persons (male and female) who are interested in and motivate the economic empowerment of economically disadvantaged community members (see no. 9 in table). It is imperative that further research seeks to deepen an understanding of this sphere of governance.

In summary, male leadership appears to govern the community as a unit and its interaction with external actors in the interest of material improvement while female leadership (mainly Pentecostal) is concerned with governing the spiritual identities of the community. The latter pattern of leadership is however sanctioned by external male leadership and confined to definite groups within the community.

Leadership is also a concern of the youth (both male and female) as a demographic and social group in the community and would provide a useful point of investigating the inter-generational and gendered patterns of leadership. Another issue which also emerged is that of governance of economic livelihood which needs to be further explored. It is this perspective that is possible most poised to illuminating the gendered issues of governance within households and between various economic groups and their dependence on the swamp's resources.

ii. Power Relations between POs



From one to one interviews and observation, the above power relations were gleaned between persons of influence in the community. Both male and female POs appear to be involved in conflictual, compromising and cooperative relationships that affect the networking/coordination or lack thereof within and between social groups of and their constituent

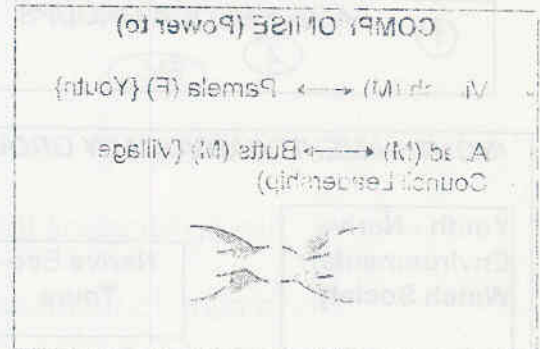
Religion and leadership claims seem to be the main forces of conflict (power over) within the community. In the case of religion, conflicts are based on ideological differences, which has strained communication and cooperation between individuals and possibly even groups. Even though there is a leadership struggle between two female religious leaders in the community, it could be deduced that patriarchal systems of leadership exist since no political spec is visible in the community re: shared/collaborative leadership. Observation of the conflictual relationships seem to also suggest that inter-family conflicts could exist especially where family blocks may have a history of competition/petty rivalry re: physical, political or cultural space.

Cooperative (power with/to) relations seem to be particularly visible between influential youth leaders (male and female). This could represent a different leadership tendency within the community that is more gender-sensitive and possible feminist in construct, where power relations are more egalitarian. This would however require much deeper investigation and validation. Youth leadership is nonetheless a powerful force re: intra-community mobilization and cooperation and in developing external linkages.

iii. Social Groups

The figure below outlines the various social groupings within the community. The pilot study was just able to identify these groups and their blocks but deeper investigation re: their construct and dynamics is required. The main character groups/blocks are as follows:

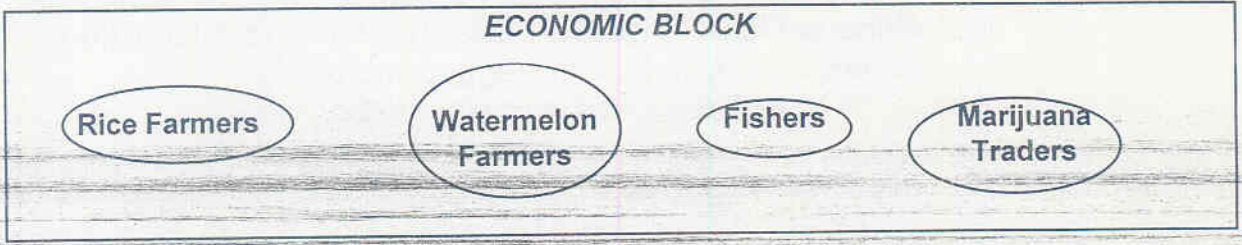
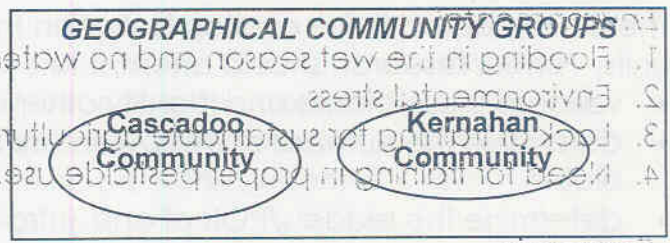
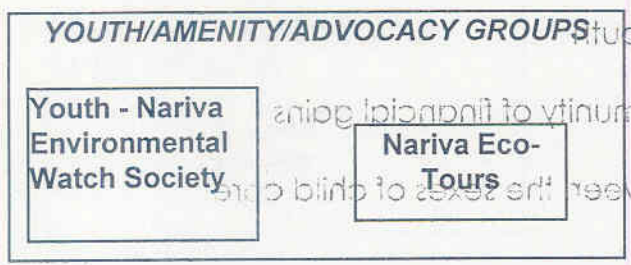
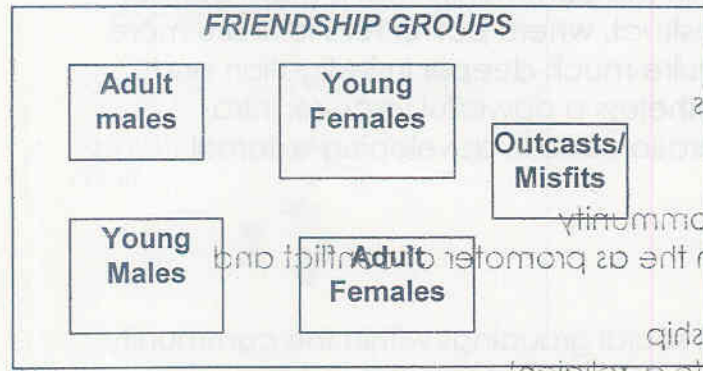
- a. Village Council Block
- b. Religion Block
- c. Geographical Community Block
- d. Family Block
- e. Economic Block
- f. Land Block
- g. Youth /Amenity/Advocacy Block
- h. Friendship Block
- i. Wealth Block



There is expected to be overlap between these blocks and their constituent units. Further research should attempt to:

- validate these blocks and identify other community groupings;
- determine the number of men, women, boys and girls in each unit of a block;
- determine the leaders/POs of and intra-action between units of a block;
- determine the leaders/POs of and interaction between blocks, and;
- organize these blocks re: types and characteristics of power relations.

MOSAIC OF SOCIAL GROUPS



1. Need for electricity and water
2. Improved roads for transport
3. Improved health care facilities
4. Low literacy levels
5. Migration (illegal)
6. Absence of school within the community
7. Need for training and forming of leadership
8. Male/Female patterns of leadership
9. Forces of conflict and cohesion (e.g. religion)
10. Land Use (e.g. access and control)
11. Social
12. Low income earning opportunities
13. Limited leisure time
14. Few recreational activities for the youth
15. **RELIGIOUS GROUPS**
16. Lack of reinvestment into the community
17. Water burden on women
18. There is an ineluctable sharing between the sexes of child care
19. Lack of skills

Sai Baba Group

Pentecostal Group 1

Pentecostal Group 2

Other

RELIGIOUS GROUPS

Cascadoo Community

Kernahan Community

'Rich'

Etc.

'Poor'

Rice Farmers

Watermelon Farmers

Fishers

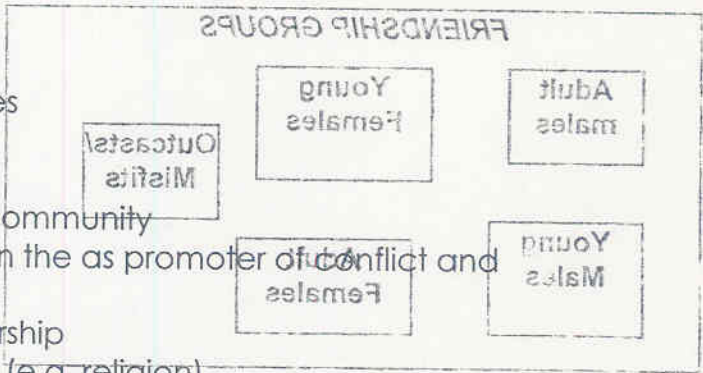
Marijuana Traders

ISSUES:

MOSAIC OF SOCIAL GROUPS

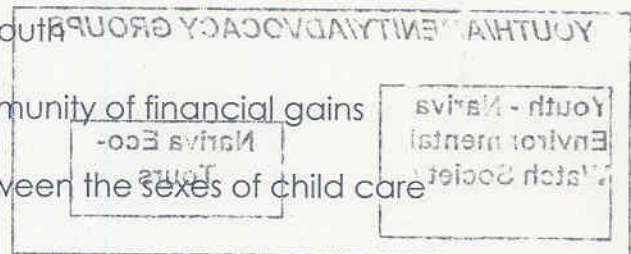
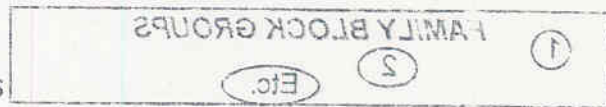
Political

1. Need for electricity and water
2. Improved roads for transport
3. Inadequate health care facilities
4. Low literacy levels
5. Irrigation (illegal)
6. Absence of schools within the community
7. Illegal fishing and farming within the as promoter of conflict and cooperation
8. Male/Female patterns of leadership
9. Forces of conflict and cohesion (e.g. religion)
10. Land Use (access and control)



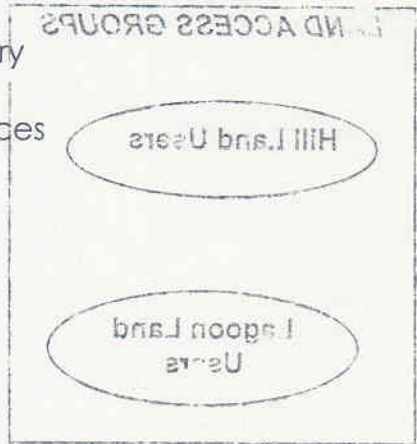
Social

1. Low income earning opportunities
2. Limited leisure time.
3. Few recreational activities for the youth
4. Domestic violence
5. Lack of reinvestment into the community of financial gains
6. Water burden on women
7. There is an inequitable sharing between the sexes of child care
8. Lack of Skills



Environmental

1. Flooding in the wet season and no water in the dry
2. Environmental stress
3. Lack of training for sustainable agricultural practices
4. Need for training in proper pesticide use.



Economic

1. Biotechnology and sustainable livelihoods
2. Lack of non-traditional economic alternatives

