

KANUKU MOUNTAINS PROTECTED AREA PROCESS COMMUNITY RESOURCE EVALUATION



KATOKA VILLAGE REPORT

August 20 - 30, 2001

&

December 1 - 8, 2002

COMMUNITY RESOURCE EVALUATION

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Acknowledgement

"Thank you"

This report is the result of work that was done in Katoka Village by the participants who represented their community and the members of the Conservation International CRE team during the CRE workshop.

All of the work in this report is result of the dedication and hard work of these persons who gave their time and shared their knowledge.

We would therefore like to thank each of the participants for taking time out from their lives to be part of the workshop.

The workshop would not have been possible without the help and support of Touchau Desmond Michael, the other members of the village council and the Community Coordinator, Sampson Anton all of whom worked together to make the CRE a success!

The Head Mistress, Loretta Marco who allowed for the use of the school building and assisted the workshop by providing blackboards, tables and benches.

We would also like to thank the cooks and their helper for working tirelessly to provide the workshop with meals.

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LIST OF ABBREVIATIONS

CI -	Conservation International
CIG -	Conservation International Guyana
CRE -	Community Resource Evaluation
EPA -	Environmental Protection Agency
GCF -	Global Conservation Fund
GoG -	Government of Guyana
GPS -	Global Positioning System
ISV -	Initial Site Visits
KMPA -	Kanuku Mountains Protected Area
NAG -	National Advisory Group
NGOs -	Non-Governmental Organizations
NPAS -	National Protected Areas System
PA -	Protected Areas
PRA -	Participatory Rural Appraisal
RAG -	Regional Advisory Group
USAID -	United States Agency for International Development

INTRODUCTION

The Kanuku Mountains are considered to be one of the most biologically diverse areas in Guyana. In addition to the numerous eco-systems and unique flora and fauna found there, the Kanukus also support the livelihood, culture, and history of eighteen villages peopled by two of Guyana's Indigenous tribes, the Macushi and the Wapishana. As a result, the Government of Guyana has identified the Kanuku Mountain Region as an important area for conservation.

This report is the result of a Community Resource Evaluation (CRE) exercise that was conducted from May to December 2002 in eighteen communities that directly use the resources of the Kanuku Mountains. The purpose of the CRE was to determine the resource use patterns of these villages. For a period of eight months a group of ten CI researchers collaborated with members of each community to determine resource use in the area through workshops, discussions, fieldwork, and surveys.

This Village Report documents the quality and intensity of the resource use of the community in its interaction with the Kanuku Mountains, and also explores the community's perceived threats to that use. The Community Resource Evaluation (CRE) focused on the resource use categories of farming, hunting, fishing, and gathering.

The CRE report provides the resource use information set required for developing a proposal for a Protected Area in the Kanuku Mountains (KMPA). It is a tool to enable the community to record and communicate its resource use information to key government decision makers and other stakeholders in the process of proposing a protected area.

The information presented in this report was collected during a ten-day workshop in which a Conservation International research team collaborated with community participants to create tools to gather information on the resource use of the village. The CI team included members from the subject communities, who served as advisors, interpreters, and facilitators in the planning and implementation of the workshops.

The results of the CRE workshop are presented in three sections. The first records the research tools created by the participants: the resource list, the seasonal calendar, and resource use sketch maps. The second section presents the results of the data shared by the participants and collected during field observation in the mountains and in the village. In the final section, the results of the tool creation and the field observation are assessed to provide a profile of the way the community uses the resources of the Kanuku Mountains.

The CIG field team members included:

Andrew Demetro	Indigenous Knowledge Advisor
Richard Wilson	Indigenous Knowledge Advisor
Nial Joseph	Global Information Systems Technician
Vitus Antone	Forest Resource Advisor
Margaret Gomes	Wapishana Interpreter
Natalie Victoriano	Macushi Interpreter
Lloyd Ramdin	Agricultural Advisor
Sebastian Tancredo	Field Team Leader
Esther McIntosh	Facilitator
Susan Stone	Project Manager/Facilitator

The entire series of CRE workshops was implemented from CIG's Lethem office with the support and assistance of:

George Franklin	Regional Coordinator
Patricia Fredericks	Education and Awareness Officer
Julie Kanhai	Database Coordinator
Wendy Leandro	Education and Awareness Assistant
Margaret Kahn	Accounting
Vibert James/Stewart Charles	Transportation
Annie Charles	Meals

This study was initiated by the Government of Guyana (GoG) under the auspices of the Environmental Protection Agency's National Protected Areas Secretariat.

WORDS AND PLACE NAMES

In the writing of this report we have made every attempt to use the names of places and resources most commonly known in the region. Both Macushi and Wapishana are oral languages in their original form. Projects are now underway to create a written form of both languages. During such a transitional period, it can be difficult to find agreed upon for word usage and spellings.

The resource lists and seasonal calendars are reproduced largely as the participants recorded them. When the same resource item was spelled in different ways, the most commonly known spelling was used. This was assisted by the feedback from the participants during the Results Feedback Workshops held in each community, and by the Macushi and Wapishana members of the CRE team.

The spelling of place names was standardized in the text of the Village Reports, again using the most commonly recognized spelling, as best it could be determined. In the list of the geo-referenced resource use sites, the place names are shown as the team members recorded them.

In addition to the community and CRE team members, we have relied on the “Scholars Dictionary and Grammar of the Wapishana Language-Tominpainao Ati’o Wapichan Paradan Parada-karu na’iki Paradauzo-kara kaduzu”, as compiled by the Wapishana Language project in cooperation with Wapichan Wadauniinao Ati’o. The Wapishana language Project, Rupununi, Guyana (August 2000) and “Makusipe Komanto Iseru: Sustaining Makushi Way of Life, edited by Janet Forte, commissioned by the Iwokrama Rainforest Program, copyright by North Rupununi District Development Board, 1996. These works provided valuable guidance in common names, word usage and spellings.

CONSERVATION INTERNATIONAL

Conservation International (CI) is a global leader in conservation – working to preserve threatened ecosystems in more than thirty countries on four continents.

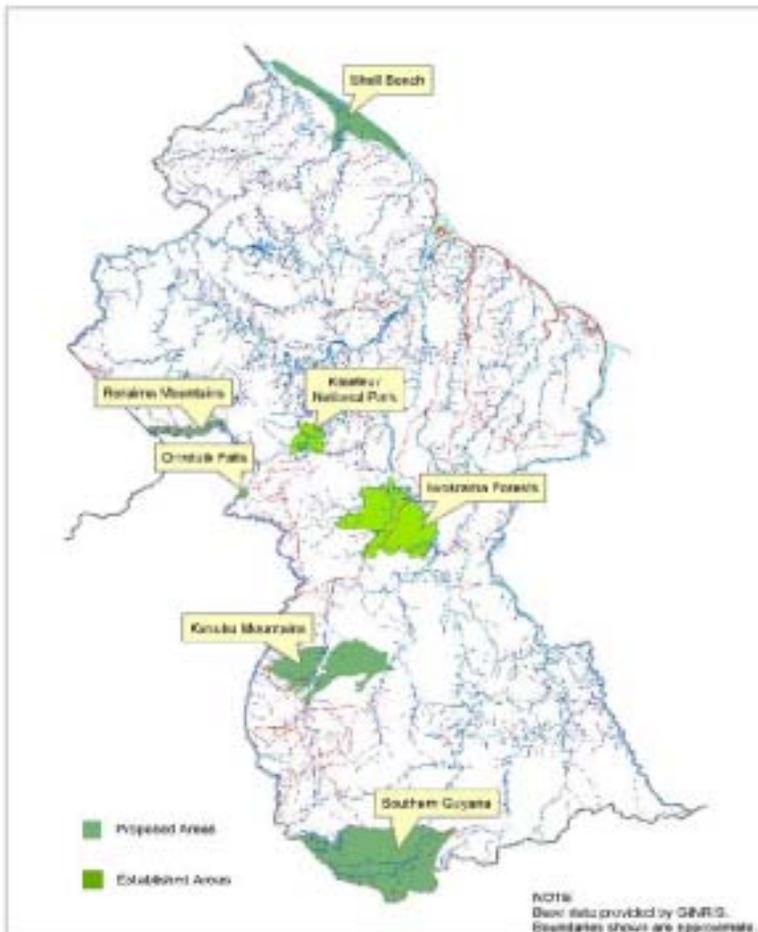
CI has been active in Guyana since 1990 and has led research expeditions, media events and educational activities. The strategic plan of CI Guyana (CIG) is to promote the conservation of biodiversity and the protection of critical ecosystems, through a process comprising scientific research based on priority setting, collaboration with partner NGOs and state agencies, and consultation with communities and other stakeholders.

In 2000, the Government of Guyana, through the Environmental Protection Agency, invited CI Guyana to perform the role of lead agency in the process of establishing a protected area in the Kanuku Mountains, one of the five priority sites identified for conservation. CI Guyana is committed to a process that involves and seeks participation of all stakeholders at the national, regional, and community levels.

PROJECT LOCATION

The Kanuku Mountains are located in the Rupununi Savannas of Region Nine of southwestern Guyana. The mountains are approximately 100 km east-to-west and 50km north-to-south and are divided by the Rupununi River into eastern and western ranges with peaks up to 1,000 meters.

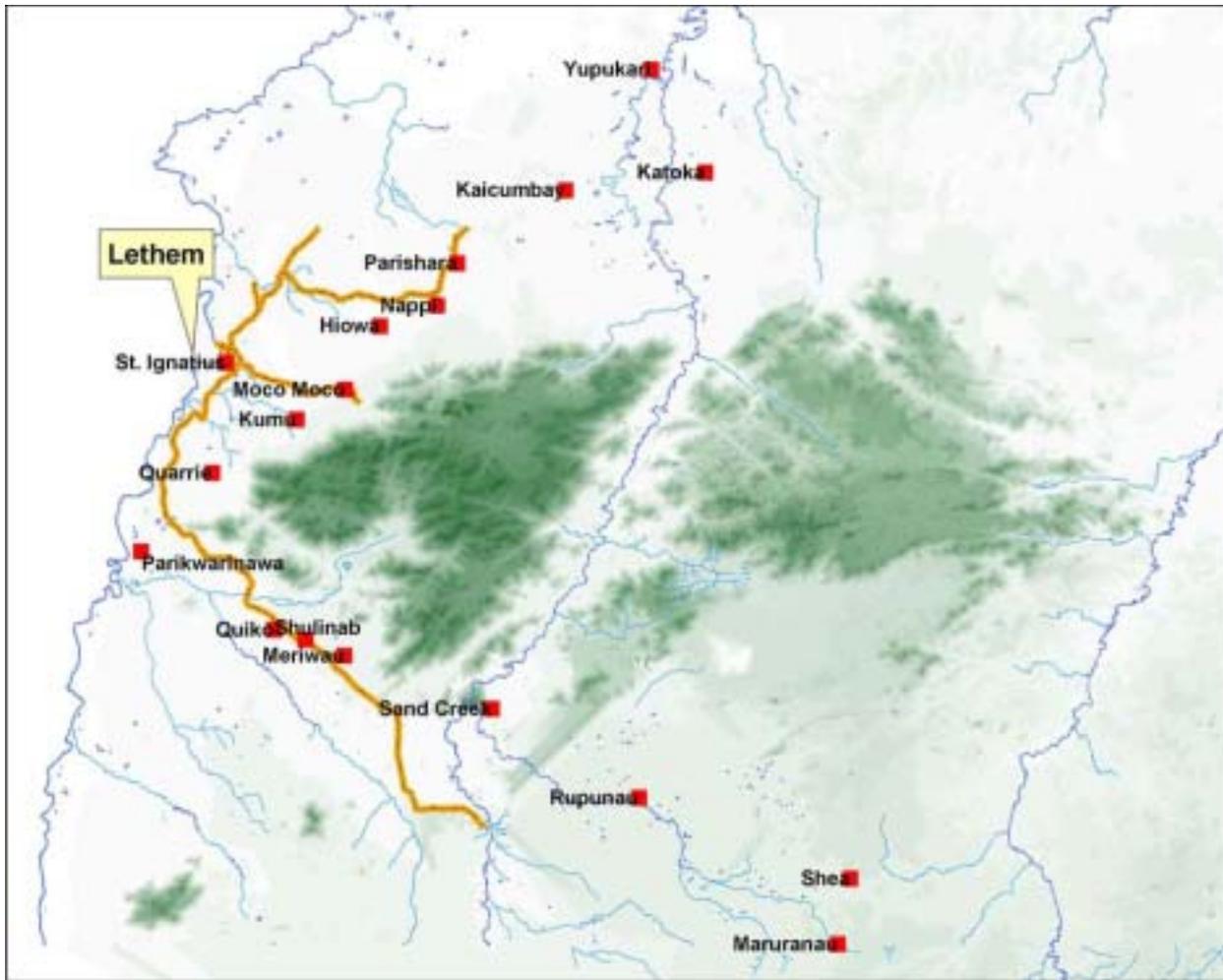
The Kanuku Mountains Proposed Protected Area (KMPA) is one of five areas in Guyana that have been identified by the Environmental Protection Agency (EPA) for conservation efforts. These areas are selected because of their beauty, landscape or richness in biodiversity.



Map Showing Five Priority Sites in Guyana

The Kanuku Mountain Range was identified because it is one of the most biologically diverse areas in Guyana. Approximately 350 species of birds, or about half of all the bird species so far identified in Guyana can be found in the Kanuku Mountains. Eighteen of these species are unique to the lowland forests of the Guianas. The Kanuku Mountains are also home to two of Guyana's nine Amerindian tribes: the Wapishana and the Macushi.

The eighteen villages that were studied use the resources of both the western (13) and eastern (5) ranges of the Kanukus. The riverain communities of Sand Creek, Katoka, and Yupukari access resources on both sides of the Rupununi River, their activities taking them into both ranges of the Kanukus.



Map showing 18 Communities that directly use the Kanuku Mountains

PROJECT OVERVIEW

Conservation International has a long-standing presence in Region 9, which began in 1991 with the filming of the Harpy Eagle for National Geographic. In 2000 Conservation International Guyana was asked by the Government of Guyana (GoG), through the EPA to be the Lead Agency in guiding the process leading up to the declaration of a Protected Area in the vicinity of the Kanuku Mountains.

In pursuing this mandate CI's work has been divided into two main areas: gathering information and engaging stakeholders.

The participation of stakeholders has been identified as being critical to the process. Therefore between April 2000 and April 2001, consultations were held with Regional and National stakeholders. Advisory committees were formed at both levels, the Regional Advisory Group (RAG) and National Advisory Group (NAG).

The RAG includes representation from local government institutions, Village Captains (Touchaus) and members of their Councils, the Touchaus Council, Women and Youth Groups, Indigenous Advocacy Groups and other interest groups functioning in Region 9.

Significant contributions of the RAG include:

- The identification of the eighteen (18) communities to be directly involved in the consultation process;
- The identification of two (2) Indigenous Knowledge Advisers to the consultation teams to ensure that culturally appropriate processes were followed, through which community members were able to express their views;
- The identification of two (2) interpreters - one (1) Macushi and one (1) Wapishana, to accompany the consultation teams;
- The endorsement of the principle of one (1) person from each of the communities functioning as a Community Coordinator. The appointment of the Community Coordinator was made by the communities and his/her role was to:
 - a. Provide a continuous presence in the villages after the consultation teams had left;
 - b. Explain during the period that the consultation teams were away from the villages, those concepts that might not have been clear to them during the meetings or for which additional information was needed; and
 - c. Function as a liaison between their community and CIG.
- The endorsement of the programme of consultations, and also the representation of the regional stakeholders on the National Advisory Group.

The RAG also made recommendations for:

- a. Improvement in the proposed programme of consultations, education and awareness engagements and training; and
- b. The scheduling of consultations.

The National Advisory Group was comprised of representatives of the natural resources sectors, other relevant agencies of GOG, the Human Rights Association, all Indigenous Advocacy Groups, other environmental NGOs, opinion leaders and Parliamentary Opposition Political Parties, among others.

Significant contributions of the NAG include the:

- Recommendations to improve the proposed programme of consultations, education and awareness engagements and training;
- Endorsement of the final programme for consultations;
- Identification of the natural resources sectors which were to be more directly involved in the consultations;
- Recommendation of the datasets to be made available for the design of the protected area; and
- Provision of a forum for the concerns of the representatives from the RAG to articulate the views and concerns of the stakeholder groups that they represented.

Initial Site Visits (ISVs) were conducted in all of the eighteen communities to provide information on Conservation International, the protected area process, and the proposed Community Resource Evaluation. Recognizing the need for an informed stakeholder group, workshops were held for community leadership (Touchau, Village Council, Teachers and Community Coordinators). The CRE activity represents a continuation in efforts to engage a wide stakeholder group.

In the area of information gathering several complementary studies were carried out. These included, digital over flights, scientific research for biological data (CI Rapid Assessment Program in 1993, 2001) and a CI commissioned Socio-Economic Survey (Gordon Forte, 2001). The Government of Guyana's 1992 *Country Study of Biological Diversity* informed these later activities. The information obtained from the CRE represents the final set of data that is required to inform the management objectives leading to the proposal of the appropriate type of protected area in the vicinity of the Kanuku Mountains.

CRE OVERVIEW

The overall purpose of the Community Resource Evaluation (CRE) is to work together with the community to understand the extent and intensity of resource use by the eighteen villages that directly use the resources of the Kanuku Mountains. By involving the community in the research the CRE also provides an avenue for the community to communicate its resource use to key decision makers and stakeholders in the process of establishing a protected area

The CRE is an informal data collection exercise to gather information on resource use patterns in the Kanuku Mountains. The study seeks to record what resources are used, the extent of use (where the communities hunt, fish, farm and gather) and local perceptions of resource availability and threats.

Some of the methods that were used in the CRE have been adapted from the Participatory Rural Appraisal (PRA) research methodology used to gather information in rural areas. It stresses a participatory approach to development and learning from the local people.

One of the main strengths of the CRE is that the community, by selecting twenty-five to thirty villagers to participate in the research, has been engaged directly. The participants took part in the exercise, received training, shared knowledge, and were able to successfully contribute to the data collection.

METHODOLOGY

The tools used in the CRE were designed to be simple and to allow for maximum participation. To ensure effective communication and understanding, sessions and discussions were conducted in the local language whenever necessary. The Community Coordinator served as part of the CI team, assisting in interpretation, logistics, and leading bush or village teams. The approach is a learning process; to this end all the participants and the CI team members are simultaneously learners and teachers.

Through discussion, spatial data exercises and field observation, a common frame of reference is created to enable the community to effectively communicate its patterns of resource use to the government and non-government agencies involved with them in the protected areas process.

At the beginning of each CRE a public meeting is held to inform the community about the exercise and to provide information. Twenty-five persons are selected by the community to represent them in the CRE. The selections are made independently, with the criteria that all community groups are represented, (including women, youths, and a range of age groups) and that persons with knowledge of the forests and trails are included.

DESCRIPTION OF TOOLS

The following tools form the basis of the CRE:

- 1. Focus Groups**
- 2. Resource List**
- 3. Seasonal Calendar**
- 4. Resource Sketch Maps**
- 5. Field Observation**
- 6. Surveys**
- 7. Mini lectures**

1. Focus Groups

The twenty-five participants work with the CRE team throughout the evaluation exercise both in large and small group discussions. During the first day's activities, this group self-selects into three focus groups of eight-nine persons to work in the resource categories of a.) Farming; b.) Hunting & fishing; c.) Gathering. Their decision is based on their knowledge of the focus group topic. The large group serves as a unit to discuss the results of the focus group sessions, and to provide feedback and broader consensus on the information recorded.

2. Resource List – “The What”

The resource list is created first, and forms the basis for the other tools. Participants list all of the resources in the category that are actively used by their community. The names of resources are listed in English and, where possible, in the local language.

3. Seasonal Calendar – “The When”

The seasonal calendar is a participatory tool used to explore seasonal changes and the activities of the village during the year in each resource use category. The creation of the seasonal calendar begins with the listing of the twelve months of the calendar year. This forms the basis for a group discussion among the entire participant group. The participants list the main seasons, wet and dry, as they occur throughout the year. The intermittent showers and dry spells are also included. Because the seasons are closely linked to the movement of the stars and other natural events, these milestones are also included. Once the seasonal comparison is completed, the large group then breaks into the three focus groups and individually lists the activities in the resource category that are done throughout the year. The groups then reconvene in the large group and present their work for validation and correction.

4. Sketch Mapping

The core of the methodology is the use of informal sketch mapping. This tool is used to create a visual, spatial representation of village resource use areas. This traditional Participatory Rural Appraisal technique is modified to exclude the use of boundaries in the mapping exercise. The goal is to have the community create a spatial record of resource use, without regard to boundaries, whether actual or perceived, and without regard to land ownership. The focus is the area of actual use wherever it occurs. This approach allows the community to focus their feedback on the primary goal of the CRE exercise - communicating and understanding where and how resources are used – with emphasis on the extent and intensity of use into the Kanuku Mountains.

In order to create a spatial frame of reference for the recording and discussion of use, participants are asked to sketch out a skeleton or base map of the significant features of the community – village center, roads, trails, waterways, that are essential to accessing and using resources. Participants draw the skeleton map on a large chalkboard from each resource group. The entire participant group must come to consensus that the base map created adequately represents the village. The skeleton map is then copied by all the groups onto separate cardboard sheets, which are used, by each focus group to record the specific resources used in the areas identified during their discussions. The maps are then presented to the larger group for input as to content and accuracy. These maps are also taken into the field so that the information can be verified through observation, and the furthest points of use as indicated can be visited, observed and geo-referenced.

When all of the individual Resource-Use Sketch Maps have been created, the resource information is combined and recorded on the chalkboard skeleton map resulting in a complete visual and spatial profile of the type and location of resource use in the community. The entire group must again come to agreement that the combined representation accurately depicts the resource use of the village. The information is then transferred from the chalkboard onto plywood board using paints in a variety of colors to create a permanent community resource use record.

All the maps are digitally photographed to preserve the data for analysis. The originals of the Resource-Use Sketch Maps and the Master Resource-Use Map remain in the community as their record of the Community Resource Evaluation exercise. A copy of the master resource map is drawn for the records of the CRE team.

5. Field Observation

After the basic tools are completed, the participants are divided into two groups: the “bush team” of approximately fifteen persons, focusing on field observation, and the “village team” of ten persons, focusing on the village survey interviews and student interactions.

The “bush team” meets as a group to study the sketch maps and to decide on the routes to be taken to observe important resource use areas, and to reach the furthest points of use. The group then divides into three groups, each assigned to a different route. The community participants lead the team, with a CI team member facilitating the work. The purpose of the fieldwork is to work together with the community participants to:

- a. Verify information on location and extent of resource use as discussed and recorded in the focus group and sketch mapping activities, using the Resource Use Sketch Map from each individual category, as the basic reference tool
- b. Record information about each site visited on a field data form.
- c. Locate and geo-reference the sites visited, including the points of furthest use in the furthest areas of use

6. Village Surveys

During the four-day period the “bush team” is in the field, the remaining participants on the “village team” conduct informal interviews with the wider community. This is done using a survey with simple questions about resource use in the same categories addressed by the focus groups:

- A mini-lecture is given on information gathering and surveying techniques
- The participants then undergo a mock interview exercise for practice
- The community participants draw an informal sketch map of the village on which all households are placed. The group selects potential interviewees based on representation of village areas and the different social groups within the village.
- The participants go out to the homes of those who have been identified to seek permission for the interview
- The interviews are conducted
- A sample of the results of the survey are compiled and studied

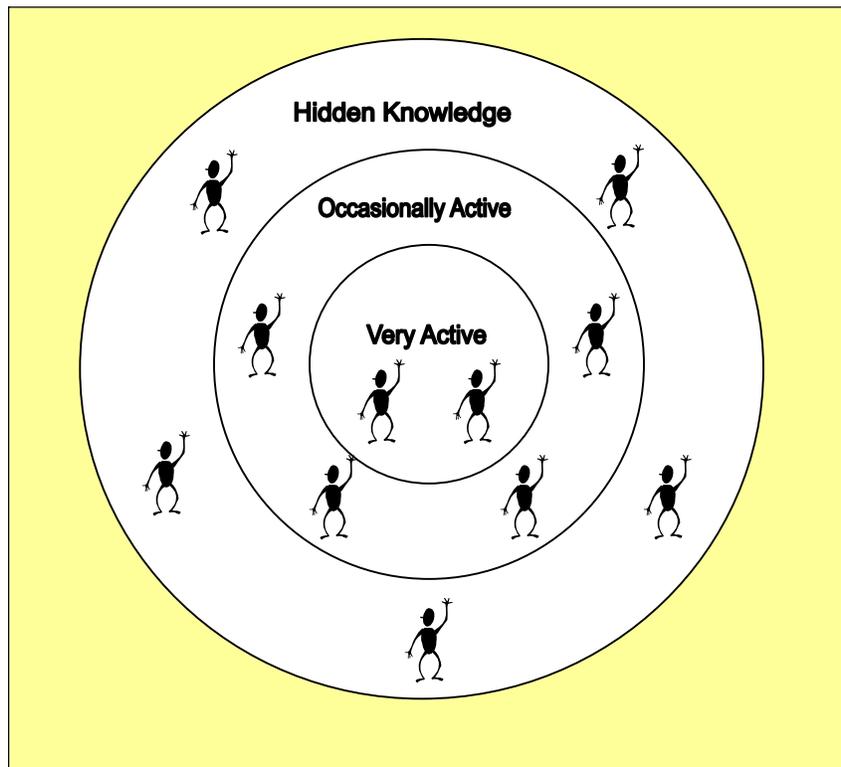
7. Mini Lectures

A number of short lectures are used throughout the exercise to build upon the education and awareness aspect of the consultation process. Topics include those which were presented in the Initial Site Visits.

1. Protected Areas
 - The categories of Protected Areas
 - The steps to establishing a Protected Area
2. Conservation International and its role as a lead agency
3. Levels of Community Participation (see diagram below)
4. Where am I on the face of the Earth
 - Informal versus formal mapping
 - Geo-referencing/GPS training – a tool to record resource site location.

5. Survey methods and techniques

LEVELS OF COMMUNITY PARTICIPATION EXERCISE



Very Active participation refers to persons that are always involved in community activities. This group of people is very informed and active in the village. An example of this type of person would be the Touchau, Councillors, Parents Teachers Friends Assn. (PTFA), teachers and community health worker (CHW).

Occasionally Active participation refers to persons who are sometimes involved in community activities, because they have an interest in one or more area, for example attendance at the PTFA or church meeting. These persons would only be part of these meetings when the topic affects them.

Hidden Knowledge refers to those persons who seldom attend community meetings. Because these persons frequently live far from the village center, they may not attend church services (where most announcements about community events are made) and are not really a part of the activities in the village. These persons often have a broad knowledge about resources and their environment, but as they do not have an opportunity to share what they know, it remains “hidden” from the community.

For the purpose of the CRE everyone is important and has an important role to play in the exercise.

TYPICAL CRE ACTIVITY TIMELINE

CRE ACTIVITY	Day 1	Day 2	Day 3	Day OFF	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10
Village Council Meeting										
Public Meeting										
Resource List										
Seasonal Calendar										
Resource Maps										
Field work Preparation										
Field Work										
Student Interactions										
Surveys										
Closing Public Meeting										

For a brief activity schedule see Appendix 1.

Community Resource Evaluation Village Report

KATOKA

KATOKA VILLAGE REPORT

Katoka was the “Pilot Village” for the Community Resource Evaluations that were conducted in the other villages. The pilot took place from 20th to 30th August 2001. During the pilot the resource lists and sketch maps were created, and the fieldwork and discussion were conducted. The work was evaluated and based on the results the CRE methodology was expanded to include additional tools, and interaction with more community members and students. In December 1st to 8th, 2002, a team returned to Katoka to conduct the following additional activities:

- Review the methodology
- Complete additional fieldwork to record observations on data forms
- Geo-reference areas not reached during the pilot workshop
- Create a seasonal calendar
- Conduct the Village survey

The CRE engaged a wide range of participants including village councillors, women and church group leaders, youths and elders. The group included persons having a vast knowledge of various aspects of their resources from which the activity greatly benefited.

During the second visit to Katoka the majority of the participants were the same just a few were replaced.

The CRE was able to successfully meet its objectives in collecting information from the community, geo-referencing the furthest points of resource use and reaching out to members of the wider community.

The information contained in this Katoka Village Report is divided into three main sections. The first section provides information on the village including demographics and a list of the participant group. The introduction is followed by a section, which lists the results of the workshop tools i.e. resource lists, seasonal calendar and sketch maps. The second section also includes the results of the fieldwork done in the mountains and in the village. The third and final section provides a resource-use profile of the village, which is an analysis of the patterns of resource use as observed and documented during the CRE.

VILLAGE DESCRIPTION

Katoka is a Macushi settlement situated on a hilly savannah area, on the eastern side of the Rupununi River, which bisects the Kanuku Mountains. Katoka sits on the eastern bank of the Katoka River at 3.55754° N and 59.29706° W. It is approximately 15 miles up river the village of Yupukari.

Katoka has its own school and health center. In 2002 Katoka became an independent community, prior to which it was a satellite community of Yupukari. Two smaller settlements Capybara and Sambora, the Simoni River settlements, are also on the east side of the Rupununi.

Farming is the major activity in the village, but since it is a riverain community fishing is a significant subsistence and economic activity.

DEMOGRAPHICS

Population

	Households	Persons
Katoka	98	429
Simoni Settlements	29	132

Source: Regional Democratic Council – Region 9

Administration

The following persons were elected to the Village Council on March 9, 2002.

- **Desmond Michael: Captain**
- **Noel Caitan**
- **Victor Gregory**
- **Ian Gregory**
- **Gibson Marco**
- **Alvina Marco**

PARTICIPANT GROUP INFORMATION

The participant group represented a wide range of persons from all parts of the village.

In total there were thirty-one participants, three (3) women and twenty-eight (28) men.

All of the councillors from Katoka took part in the CRE including the Touchau, Desmond Michael. In addition there were church leaders, youth leaders, members of the Sisters Bible Class and the Sports Club. The group also consisted of farmers, hunters, fishermen and gatherers who brought a wealth of knowledge to the workshop.

The majority of participants had been involved in a workshop before. Not all of the participants were originally from Katoka but had been living there for between 4 – 42 years.

James Campbell	Kevin Alvin	John Andrew	Desmond Michael
Marvin Lawrence	Kenrick Campbell	Norma Campbell	Dorrick Elmo
Herbert Francis	Alvena Marco	Gibson Marco	Edmund Donald
Harry Samuels	Carl Antone	Samuel Roberts	Rodney Stanley
Darrol Bernard	Randolph Browne	Noel Caiton	Alfred William
Thomas Daniels	Victor Gregory	Johnny Rodwell	Alexander Collin
Grennison Rogers	Wilfred Rogers	Trenton Lawrence	Daylight William
Alson Anton	Francisco Daniels	Danty Lawrence	

Sampson Anton (Community Coordinator)

Participant Age Profile

AGE	15 - 28	29 - 40	41 – 55	Above 55
No. of persons	4	15	11	1

A profile of the CI team is listed in Appendix 2. The CI team consisted of:

Andrew Demetro	Lloyd Ramdin
Margaret Gomes	Susan Stone
Nial Joseph	Natalie Victoriano
Richard Wilson	George Franklin



CI Team Members.

CRE WORKSHOP RESULTS

CREATION OF THE TOOLS

The pilot for the Community Resource Evaluation project was done with the cooperation of Katoka Village in August of 2001. After evaluating the pilot workshop, the Seasonal Calendar was added to the tools, the Village survey work was expanded and the student interaction added. In order to complete the new activities, and to review the tools created during the pilot, a second workshop was held in Katoka in December of 2002.



The seasonal calendar being created by participants of the farming group

The creation of the tools for the workshop took approximately three days. The participants divided themselves into three focus groups to produce the tools in the different resource use areas: farming, hunting/fishing and gathering. After each tool was complete, the group reported on the work. This allowed contributions and agreement from the whole group for each resource area. Each group created a resource list and sketch map. The seasonal calendar was done with the help of the whole group.

Participants created three tools to help communicate Katoka's resource use:



Examples of sketch maps that were created

- Resource list – “what” resources the community uses
- A Seasonal Calendar – “when” the resources are used
- Sketch Maps – “where” the resources are found

In this section the results of each of the resource focus groups will be examined individually. The information is presented in the following order: farming, hunting, fishing, and gathering.

RESOURCE LISTS

“The What”

FARMING

The farming group listed fifty-six different types of crops that are planted by the community. The group divided the list into three main areas: crops that are planted in the farms (which are usually far distances from the home), gardens (kitchen gardens that are closer to the home), and benah (local charms).

Crops			
1.	<u>Farm:</u>		<u>Garden:</u>
2.	Beans	30.	Tomato
3.	Beads	31.	Onion
4.	Gourds	32.	Calalu
5.	Calabash	33.	Squash
6.	Sorrel	34.	Boulanger
7.	Arrow cane	35.	Benah
8.	Barley	36.	Coffee
9.	Crawa	37.	Poison plant (Cunani orange)
10.	Cotton	38.	Mango
11.	Papaw	39.	Coconut
12.	Watermelon	40.	Tangerine
13.	Rice	41.	Lime
14.	Pumpkin	42.	Grapefruit
15.	Black eye peas	43.	Guava
16.	Potato	44.	Cashew
17.	Peanut	45.	Anato-Crayabe
18.	Pine apple	46.	Jamoon
19.	Corn	47.	Whitey
20.	Sugar cane	48.	Sour sap
21.	Yam-Bell & Round	49.	Orange
22.	Plantain	50.	Lemon grass
23.	Banana	51.	Dunks
24.	Cassava- bitter & sweet	52.	Pear
25.	Pepper	53.	Tambrine
26.	Eddoe	54.	Cherries
27.	Bora	55.	Five finger (carambola)
28.	Eschallot	56.	Broad and fine leaf thyme
29.	Ochro		

HUNTING & FISHING

The hunting and fishing focus groups listed a number of both fish and game. As the table below shows the game included birds (macaw, pigeon, cranes, ducks, parrots) and animals (tortoise, agouti, tapir). In total there were twenty-seven entries.

The fishing group listed forty-three different types of fish that are actively used by the community. The list includes: haimara, tiger fish, yarrow and patwa.

Hunting		Fishing			
1.	Tapir	1.	Haimara	24.	Button fish
2.	Bush hog	2.	Houri	25.	Banana fish
3.	Savannah deer	3.	Lukunani	26.	Minny fish
4.	Tortoise	4.	Arawana	27.	Mata mata
5.	Labba	5.	Biara	28.	Shine belly fish
6.	Agouti	6.	Tiger fish	29.	Timan
7.	Armadillo	7.	Dawala	30.	Sardine fish
8.	Powis	8.	Perai	31.	Sou sou
9.	Maam	9.	Hassar	32.	Logo logo
10.	Macaw	10.	Dari	33.	Wax fish
11.	Pigeon	11.	Yakatu	34.	Kui kui
12.	Baboon	12.	Imiri	35.	Paca mou
13.	Monkey	13.	Arapaima	36.	Lau - lau - Pashishi
14.	Waracabra	14.	Crab	37.	Quman (fat head)
15.	Watrash	15.	Turtle	38.	My payiwa
16.	Crane	16.	Pacou	40.	Sun fish
17.	Ducks	17.	Yarrow	41.	Basha
18.	Parrot	18.	Patwa	42.	Mud eel
19.	Duckla	19.	Mangi	43.	Electric eel
20.	Toucan	20.	Butter fish		
21.	Marudi	21.	Dog fish		
22.	Iguana	22.	Pine fish		
23.	Adouri	23.	Cuti		
24.	Bastards				
25.	Twa twa				
26.	Bush deer				
27.	Buffalo				

GATHERING

The gathering group listed forty-seven different types of materials that are gathered by the community. The group divided the materials into three sections: house materials (clay, lumber, rails, cocorite leaves etc.), craft materials (gum, balata. Muckru), and wild fruits (wild cashew, bird cherries etc.)

Balata bleeding is done in Katoka to supply the Nappi Balata Artisans and other markets.

Materials			
1.	<u>House Materials:</u>		<u>Fruits:</u>
2.	Clay, mud	28.	Bullet wood
3.	Rails	29.	Locust
4.	Wattles	30.	Ginie pop
5.	Straps	31.	Honey
6.	Scantlings	32.	Ete
7.	Boards	33.	Whitey
8.	Lumber	34.	Wild papaw
9.	Ete	35.	Wild cashew
10.	Beams	36.	Plum
11.	Rafters	37.	Bird cherries
12.	Posts	38.	Brazilian nut
13.	Arrowa	40.	Cocrite
14.	Cocrite leaves	41.	Awara
15.	Spiers	42.	Turo
	<u>Craft Materials:</u>	43.	Lou
16.	Gum	44.	Wild ginep
17.	Wase	45.	Manicole fruit
18.	Anato	46.	Ete worms
19.	Cupa	47.	Crab fruit oil
20.	Feathers		
21.	Bitter wood		
22.	Leopard		
23.	Balata		
24.	Tibisiri		
25.	Caramani		
26.	Muckru		
27.	Nibi		
28.	Incense		
29.	Manicole leaves		

SEASONAL CALENDAR

“The When”

The seasonal calendar was created using the entire participant group. The group’s first task was to outline the main seasons of the year, as they know them.

The group identified two main seasons, the dry and the wet season. These seasons were then written down in the months of the year in which they occur. As can be seen in the table the group identified a number of shorter intermittent spells of wet or dry that occur within a larger season such as “Turtle Rains” shown in February.

Constellations serve as a milestone for the seasons. These are: Seven Stars Going Up (April), No Leg Lady (July), And Town – com-bi (August – September). In addition several activities in nature have also evolved as markers for the beginning or ending of a season. On the calendar these are: Turtle Rains, Beatle Rains (May), Iguana Rains (September) and Cashew Rains (December).

Once the seasons were established and agreed to by the entire group, the participants proceeded to look at each resource category (farming, hunting & fishing, and gathering) and list the activities that occur in those seasons. The information that follows is a description of the results of the completed seasonal calendar.

FARMING

The activities of the farming group were separated into two categories: high bush (Okai – U) and low bush (Mim Pita) . The term “high bush” refers to a new area of virgin forest that has been cleared for farming. High trees and fertile soil characterize the area. On the contrary a low bush area is one that has been used previously or returned to after allowing the soil in the area to replenish.

Low bush:

Land preparation i.e., the clearing of the area is done in the dry season. Planting is done in April/May. Some reaping also begins in May. The farms are maintained in June/July (weeding and the putting on of fertilizer).

High Bush:

January is the month when trees are allowed to dry after they have been cut down. The burning and clearing of the land in preparation for planting follows this. Towards the end of the year peanuts are reaped, but from April to August reaping of some crops is already occurring.

HUNTING & FISHING

As the calendar shows, hunting occurs at certain times of the year; January – March, May – July and November – December. A number of types of game is caught and as the calendar shows this is done by using a variety of methods: hunting dogs, guns, dogs, bow & arrow and horses.

Fishing is done throughout the year. A number of fish are caught as listed on the calendar. Fish are caught using different methods: traps, bow and arrow, hook traps, fishing rods, diving masks etc.

GATHERING

The gathering of resources is done throughout the year. As shown in the calendar, the community is engaged in collecting a number of materials: wild fruits and nuts, honey, birds, house materials, and balata.

Revised Seasonal Calendar for Katoka

January	February	March	April	May	June	July	August	September	October	November	December		
Dry Season			Beginning of Rainy Season	Heavy Rains (Floods)			<i>Town-com-bi</i> Beginning of Dry Season		Cashew Rains	Short Season Sun & Rain		Season	
	Turtle rains		7 stars Go Down	Sun Beee	7 stars Come IIP	No Leg Lady Rain		Iguana Rains					
HIGH BUSH / Okai-I													FARMING
Drying	Burning	Clearing Land		Planting		Weeding & Moling		Lapping & Cutting down		Drying			
Weeding and Moling			Planting: cassava, banana, provisions, weeding & moling Reaping: cassava, banana, peanuts					Reap: Peanuts					
LOW BUSH / Mumpi-tta													
Cutting & lapping down	Drying	Burning	Clearing & Planting		Weeding & Moling		Lapping & Cutting down		Drying	Burning	Clearing & Planting		
				Reaping Short Season Cassava				Planting Short Season Cassava		Weeding			
				Peanut									
Bush hogs, tapir, Bush deer, labba, watrash, powis				Bush hogs, labba, Bush deer, tapir, agouti, armadillo, powis, maam						Usual hunting – same animals			HUNTING
Bow & arrow, guns, dogs				Methods: Hunting dogs, horse to chase, boat				Bow & arrow, hunting dogs					

Revised Seasonal Calendar for Katoka continued

January	February	March	April	May	June	July	August	September	October	November	December
Biara, haimara, pacou, crabs, arawana, lukunani, turtle, houri, perai, yakatu, dog fish, basha, patwa, piab, hassar, tiger fish, banana fish, sun fish, alligator, imiri, sou soci, yarrow, butter fish, fat head fish, logo logo, wax fish			<i>Fish March</i> Biara, houri, yarrow, hassar, patwa, pacou, mangi, pine fish	Tiger fish, wax fish, perai, mangi, pine fish, piab, button fish, Kuyu Kuyu			Biara, Butter fish, banana fish, Lou lou, perai, lou lou, arawana, lukunani, dari, dawala fish				
cast net, seine, bow & arrow, diving mask, seine, poison				Methods: Hooks, line, seine, traps			Bow & arrow, seine, hook traps, hook & line Right through this season to Long Dry				
← House material and craft materials e.g. Muckru, nibi, et cetera, feathers, Tibisiri for Heritage Month, Green heart seed, Wranakipeti-ye (Synconia), Wani ye, Balata Bark, Boat making, firewood, honey collecting →											
Wild Fruits: Lou, Turo		Wild Fruits: Bird Cherries		Arowa, cocrite, posts, rafters, beams, lumbering, Balata bleeding			Allow Balata latex to dry				
						← Ete, Making oil against mosquitoes, coboros, et cetera, e.g. crab oil, cocrite oil, arrowa oil →		Brick making, plastering clay, Brazilian nuts (yearly), bullet wood fruit (every 2 years)			
						Wild Fruits: Plum		Honey Collecting, Trapping birds: Towa Towa, Parrots			
← Methods: Picking, cut & carry, gathering, collecting, gum, bird nets, calling bird →											

FISHING
GATHERING

SKETCH MAPS “The Where”

The sketch maps were the last tools that were created. A group of participants most knowledgeable about the community’s resource areas was selected to draw a base or skeleton



Group work on creating the background map

map on a chalkboard, noting major features such as rivers, creeks, trails and the mountains. After the entire group viewed and agreed to the accuracy of this representation, the base map was copied onto separate cardboards. These were then used by each focus group to record the resource locations. In total three sketch maps were created in the three resource group categories of farming, hunting & fishing, and gathering. The keys of each resource map show the main resources that the participants selected to be included on the map.



Participants drawing a resource map

The sketch maps were used by each of the field research teams to choose their routes.

The maps show all the major resources in each resource category as prioritized by the participants.

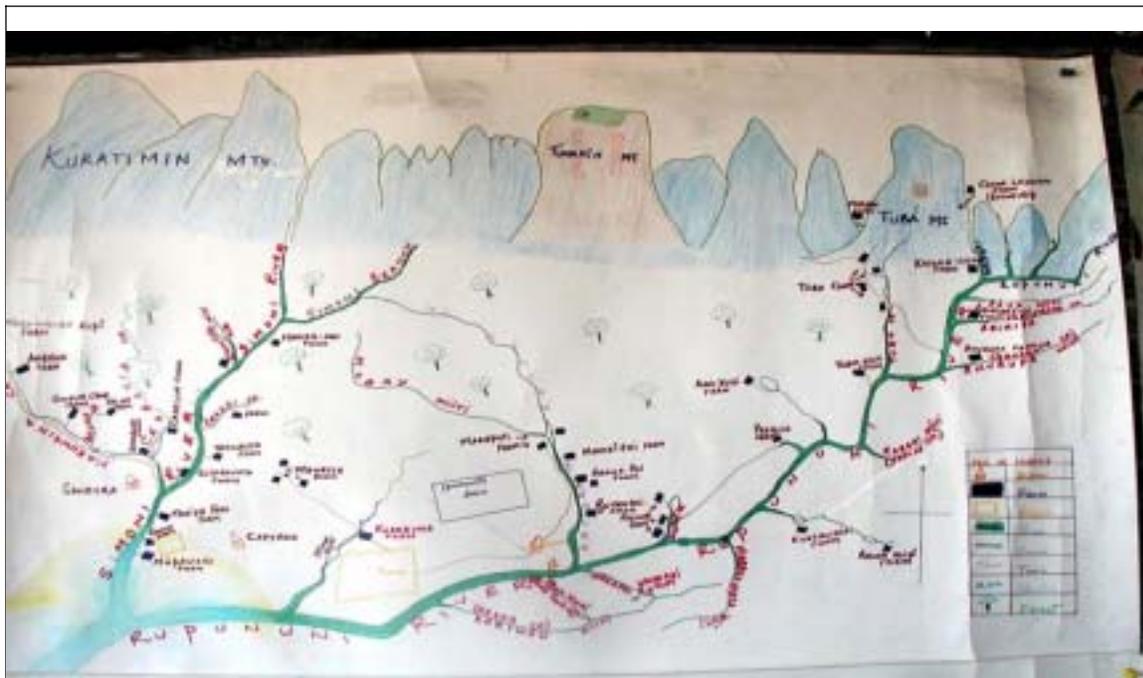
The main rivers identified on the maps are the Simoni and Rupununi. Three of the main mountains are also shown these are: Tuba Mountain, Kuratimin Mountain and Tunamin (Blood) Mountain.

Farming Resource Use Sketch Map

The farms used by the people of Katoka are mostly scattered along the Katoka Creek and Rupununi River. Within the triangular area of Mobay-wiiti, Katoka and Aruwa Creeks, appears to be the area where most farms are concentrated. A few farms are also noticeable along the Tuba and Mapari Creeks, which flow from the Tuba Mountain area into the Rupununi River.

From Katoka the most common means of accessing farms is via the waterways in canoes. It can take up to three days paddling to reach the furthest areas.

At the foot of the Tuba Mountain almost adjacent to the Mapari Creek, the Katoka Village farm is located. The residents of Copybara and Sambora utilize the Simoni area. Again the farms are scattered along the Simoni and Marunawaina creeks. The Simoni creek flows from the Kuratimin Mountain into the Rupununi River. However there appear to be no farms within close proximity of the mountains. The two furthest farms at either location, Simoni and Marunawaina Creeks are Merisaraw and Ambrose's farms respectively, which are some distance from Kuratimin Mountain. Most farms in this locality are reachable by canoes and the inland farms, by walking.



Katoka Farming Map

Hunting and Fishing Resource Use Sketch Map

Hunting occurs mostly from the village going N-NE-NW up to the mountain foot. Most of the activities take place in the savannah areas, Simoni, Girl's Cave and in front of the Blood Mountain region.

Most of the fishing activities take place in the and along the Rupununi River, Sambora Creek, Awarakaru Creek, Mapari Creek and during the dry periods in ponds found in the savannah and forested areas.

The river and creeks are known for their high diversity of species, especially the catfish family and endangered species such as the Black Caiman, Arapaima, and the Giant River Otter.

The people in Katoka, Sambora and Capybara, depend on the waterways and fish catch for their livelihood.



Katoka Hunting and Fishing Map

Gathering Resource Use Sketch Map

The areas of resource use occur mainly in the areas of the Rupununi River, the Simoni River, Bat Creek and the Kanuku mountains.

The main resources used are materials e.g. logs and other wood for houses and boat building, palm leaves for roofing. Fruits especially from palm trees and nuts, craft material e.g. muckru, nibi, caramani, balata etc., medicinal and other material are also gathered from these areas.

Most of the resource areas are accessed by boat, as there are not many trails represented on this map.



Katoka Gathering Map

FIELD OBSERVATION

INTRODUCTION

The fieldwork in Katoka was done in two parts: during the “pilot CRE” held in August 2001, and the final CRE held in December 2002. Before the fieldwork began the members of the “bush team” received training on the use of the Global Positioning Unit (GPS). During the second set of trips, the teams also learned the use of data recording forms.

In total there were three teams for the pilot, and two additional field trips for the second workshop with approximately 6 persons on each team. The teams were grouped according to the areas that had to be covered. Each team observed and geo-referenced areas found along the way in each of the resource categories: farming, hunting & fishing and gathering.

A CRE team member led each group but all members of the team actively contributed to the information collected. The reports that follow reflect observations and information gathered from the entire group. The information is presented individually, for each team including, who was on the team, the areas that were covered, and general observations.

Team A: August 2001

Andrew Demetro (CI)

Margaret Gomes (CI)

James Campbell

Wilfred Rogers

Phillip Andrew

Kenrick Campbell

Carlie Brown

AREAS VISITED

The furthest point visited by the team was **Blood Mountain** (Tunamin Mountain), which is approximately 12 miles from the village. Other areas that were visited were:

- **Aruwa Falls**
- **Pragua Pool**
- **Tuba Creek Mouth**
- **Tuba Pond**
- **Tuba Farm Area**
- **Tuba Mountain Top**

OBSERVATION

This is a riverain area. Part of the trip to the furthest point is done using canoes, up to Tuba Creek Mouth. A trail used from this point to the Tuba farm area takes about 2 – 3 hours of constant walking.

The Tuba Pond is located midway between the boat boarding point and the Tuba Farm area, which serves as a point of resting.

Resources in these areas are intact. These areas that were used during the balata bleeding days are now being reused. People in the area are bleeding balata once again to supply the Nappi Balata Artisans and other markets.

Although people have been using the area for about ten years, the resources are still intact. Nibi, muckru, balata and others were observed all along the Tuba Farm area.

Areas to the furthest point were frequently visited. However when these areas are visited it is primarily to hunt game and gather caramani. Other resources are abundant due to light use.

There were visible threats to the caramani resources, which are used for arrows and craft. It was observed that these trees were sometimes cut down to gather resin, rather than bleeding. This practice can affect the availability of this resource in the future. Closer to the community, continued burning of the forest seemed to affect the healthy look of the areas along the banks of the Rupununi River.

Team B: (August 2001)

Lloyd Ramdin (CI)
Natalie Victoriano (CI)
Alvin Andrews
Michael Antone
Alvena Marco
Desmond Michael

AREAS VISITED

The furthest point visited by the team was **Mapari Falls**, which is approximately 38 miles from the village. Other areas visited were:

- The mouth of **Katoka Creek**
- The mouth of **Aruwa Creek**
- **Salipenta Landing**
- **Quata Landing**
- **Tuba Mountain Foot**

OBSERVATION

Some farms exist along the Mapari River banks, as soils closer to the mountains are of better quality. These were old farming areas used during the balata bleeding days, which have regained their fertility. The soil texture is perfect for the cultivation of crops such as cassava, yams, eddoes, cane, and citrus. Yupukari village also uses areas such as the Aruwa Creek banks, Salipenta and Quata landing to do farming. Farmers are returning to the Mapari area as available land along the Aruwa Creek area is being used up due to population growth.

The community also fished along the Rupununi River. The species that are caught are the more rare species such as the arapaima, lukunani and the haimara.

The hunting resources did not appear to be under threat because of the many track signs of wild hogs, agouti, deer and tapir. However, these animals are considered a threat to the farming activities, as they are pests to crops such as cassava, bananas and yams.

Other communities such as Yupukari and Sand Creek also use these areas for fishing, hunting and gathering.

Team C: (August2001)

**Nial Joseph (CI)
Richard Wilson (CI)
Herbert Francis
Carl Antone
John Andrew
Darrol Bernard**

AREAS VISITED

The trip covered a distance of 16.9 miles toward the Simoni creek head area. Other areas covered along the way were:

- **The farm sites at the bush mouth**
- **Plum Creek**
- **Simoni Creek**
- **Simoni Creek Main Landing.**

OBSERVATION

Farmlands are large, the farmers plant on a large scale of mainly mixed crops. The produce of the farms is largely for domestic consumption.

Deeper in the bush there are many bush medicinal plants which the people gather for their use when they are sick. Housing materials are also found in abundance.

Both hunting and fishing are done through nearby farming areas. Many of the animals feed on the crops.

All of the resources were found to be in excellent condition.

The areas are not visited often as was evidenced in the trails, which were no longer used. Villagers go to the furthest areas infrequently. In Simoni Creek Main Landing fishing is done approximately two times a month and the furthest areas once or twice a year.

Team A (December 2002)
Lloyd Ramdin (CI)
William Alfred
Donald Edmond
Elmo Dorrick
Stanley Rodney (guide)
Collin Alexander

AREAS COVERED

The furthest point visited by the team was the **Crab Hill**, which is 21 miles away from the village. Other areas visited by the team include:

- **Black Water Creek**
- **Simoni River**
- **Calabash creek**

OBSERVATIONS



Haiari, one of the many fish poisons use to catch fish during the dry season

Along the way the team passed through the savannah, swamps and low hills with most of the forest being of the category of Mora forest and a few hard wood types. The soil type ranged from gravelly to loamy to peggasse to clay to sandy. The land had a very sloping elevation. The team guides indicated that this was new territory for them.

The resources along the way as was observed were in excellent condition since the populace of the communities does not use the areas. We reached bush hogs and other game/animals along the route. As we proceeded for about an hour or so, from the camp at Calabash creek, the Mora forest gave way to a green heart forest.

To obtain waypoints via satellite we had to wait at one time for instance, more than an hour to obtain a reading. This was due to the thick canopy and a heavy cloud cover.

The point as was indicated on the map (the Green heart reef area) was reached, observed and geo-referenced.

The forest resources there are in excellent conditions mainly due to the distance, lack of proper tracks. It was told that a local timber business was doing some amount of prospecting in the area.



A Green heart seedling, a major timber species in Guyana

Team B December 2002)

**Nial Joseph (CI)
Herbert Francis
Danty Lawrence
Trenton Lawrence
Carl Antone
Sammuel Roberts**

AREAS COVERED

The furthest point that was visited by the team was **Bamboo Mountain**, which is 28 miles from the village. Other areas that were covered by the team were:

- **Danty Farming grounds**
- **Simoni Creek**
- **Black Water Creek**
- **Bamboo Creek**

OBSERVATION

The farming lands belong to a family group of farmers and are approximately seven miles east from the village. The farmers mainly plant mixed crops. The soil is black and loamy, and the land produces a good yield. The main staple cassava is planted on a larger scale than the other crops.

Farmers transport their produce by bicycle. The areas deeper into the bush, such as Simoni and Bamboo Creek, are the main fishing, hunting and gathering areas. Farmers build farm camps for both the dry and the rainy season.



Bush team members display their catch, the haimara fish



Harvesting plantains in one of the farms visited

The areas are in good condition for hunting, fishing and gathering. In the furthest areas (Bamboo Mountain) there are special areas where medicinal plants and other useful herbs are collected.

The CRE team met up with an exploring team from outside the village who were looking for minerals in the area.

DATA RESULTS

INTRODUCTION

The fieldwork for both CRE activities was conducted in the areas that were identified on the Resource Use Sketch Maps. A description of each of these trips was reported under the Field Observation section. The purpose of the exercise in addition to observation was to geo-reference the areas of furthest use. This was done using a Global Positioning System (GPS) unit and a Data form, which is described below.

The entire participant group was given basic training on how to use the GPS units. The bush teams received additional training on the units and were also shown how to record data on the data forms. The information presented in this section is therefore the result of the work, which was recorded by the “Bush teams”. The data forms were added to the field observation process after the pilot study. Therefore, the data described in the graphs below was gathered during the December 2002 workshop.

The results are presented in this section of the report. The information is shown in the form of bar graphs. The graphs are used to show the main threats to the areas visited, as well as the intensity and quality of use.

Each graph is followed by a description of the information that is represented on the graph. Information is presented for the three resource use categories, farming, hunting and fishing, and gathering.

DATA SUMMARY

In total forty-three (43) waypoints were taken during the second workshop. The following is a summary of all the waypoints that were taken in each category

- **Farming** **6**
- **Hunting** **14**
- **Fishing** **13**
- **Gathering** **10**

FARMING DATA RESULTS

QUALITY

The soil type in the majority of farming areas visited was loamy (5) and clayey (1).

The crops planted on the farms plant mixed crops (5) and banana (1).

INTENSITY

The farms that were visited are concentrated in the bush (6). All of the farms that were visited are actively used.

The farms are mainly 2 – 5 acres (4) or more than five (1). Five of the farms visited use the produce for domestic consumption and one for both sale and domestic use.

THREATS

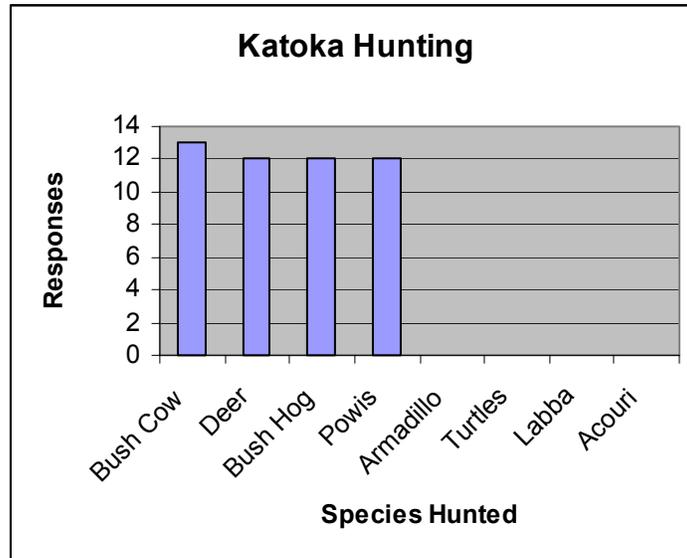
There were no threats entered for any of the sites. Two pests were recorded as effecting the crops: acoushi ants (5) and hogs (4).

HUNTING DATA RESULTS

QUALITY

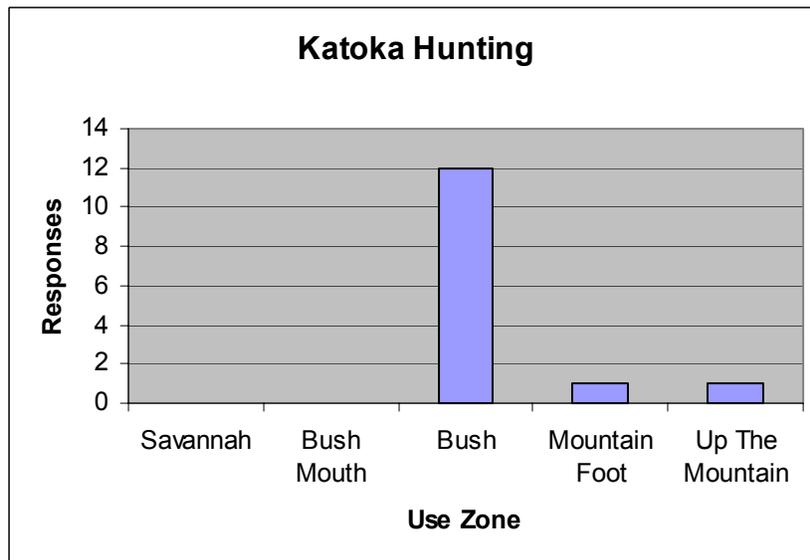
The quality of the hunting resources is considered to be excellent (11).

The game that is hunted was entered as bush cow (13) deer (12) bush hog (12) and powis (12).
See graph

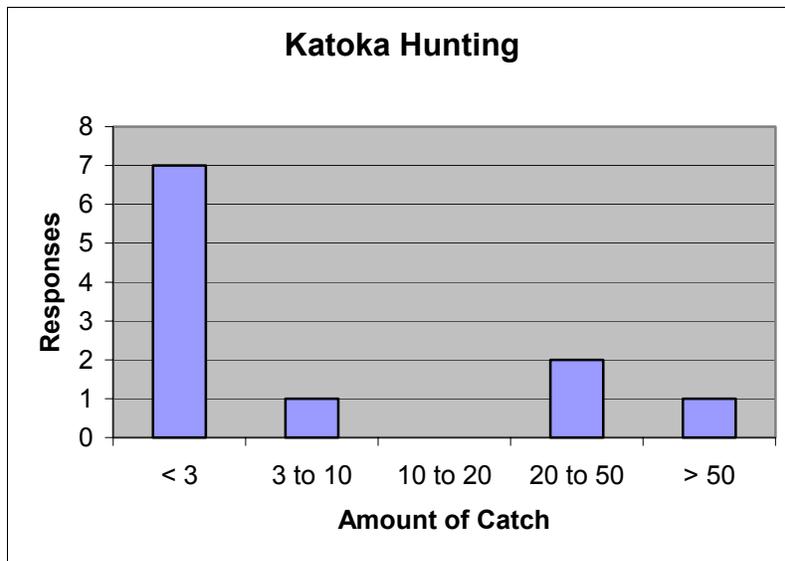
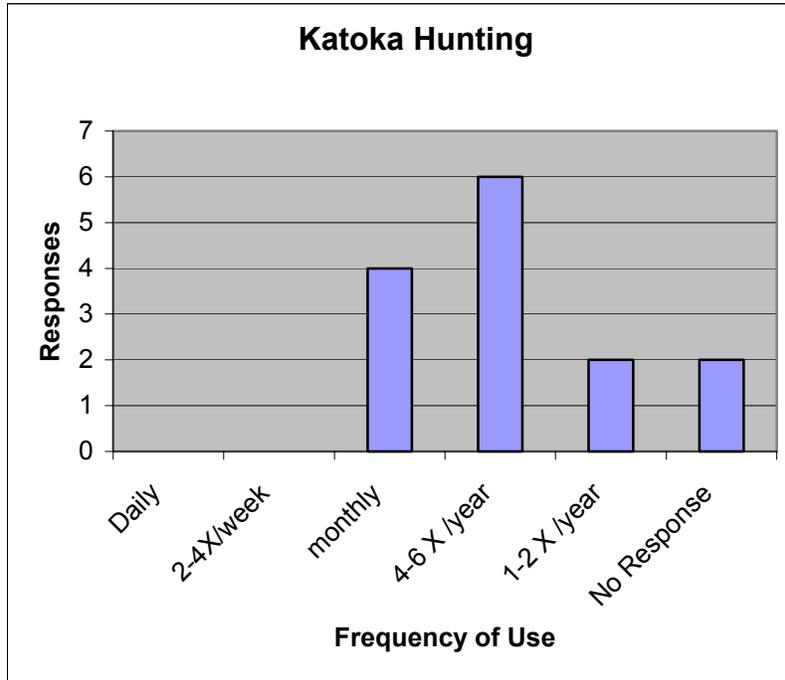


INTENSITY

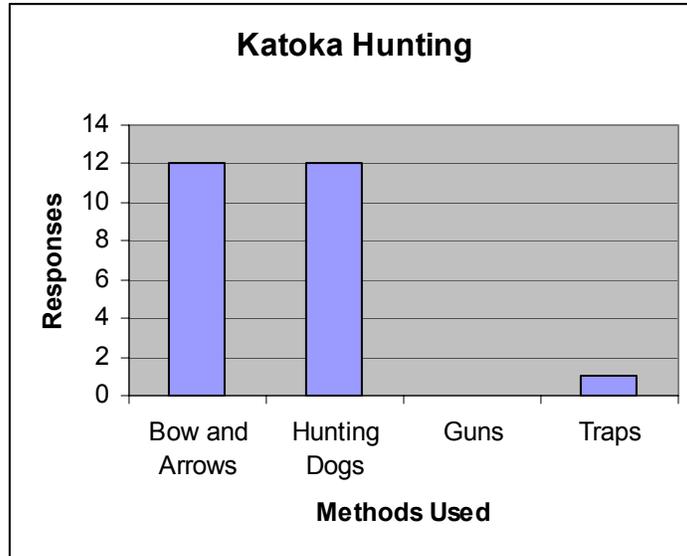
The areas that were visited were concentrated in the bush areas (12). **See graph.** Twelve of the sites visited were active.



Hunting is done in these areas mostly 4 – 6 times a year (6) in these areas. **see graph.** The number of game is mainly less than three (7). **See graph.** Twelve of the sites visited are active.



Hunting is done using mainly traditional methods: bow and arrows (12) and hunting dogs (12). **See graph**



THREATS

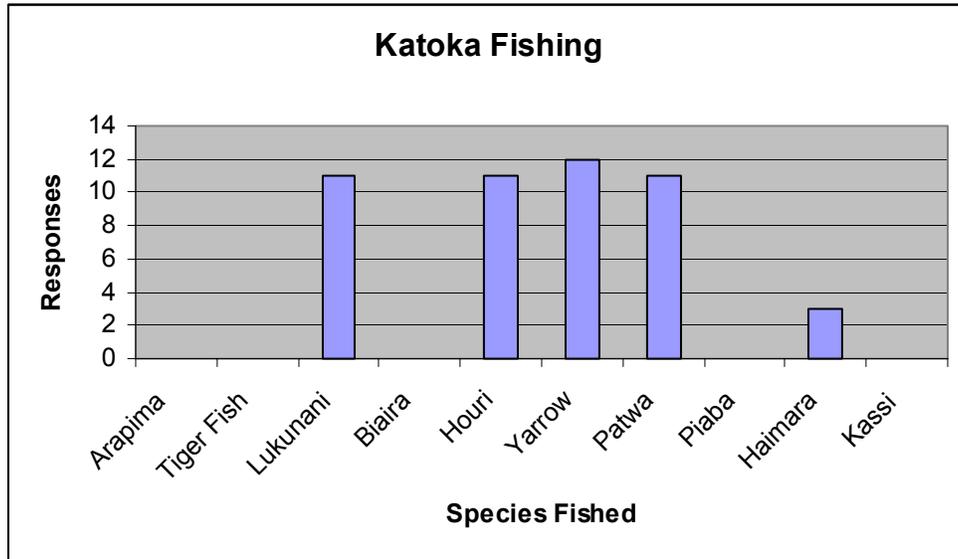
There were no threats to the hunting resources recorded at any of the sites.

FISHING DATA RESULTS

QUALITY

The condition of the fishing resources was considered to be excellent (13).

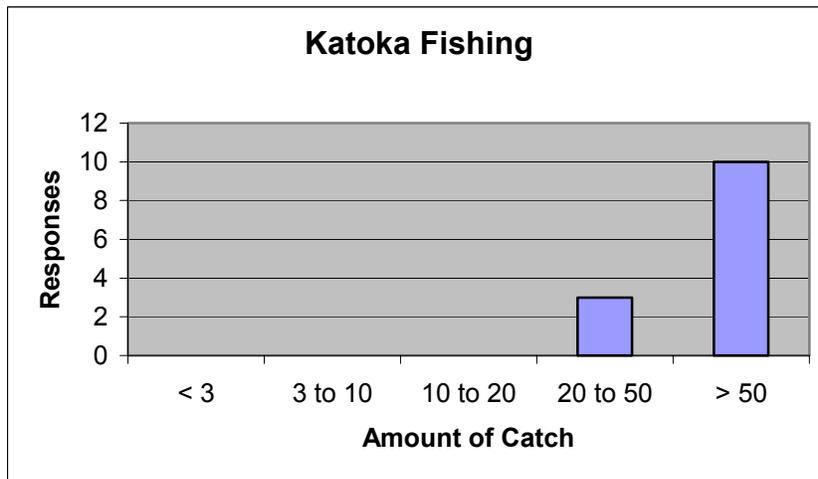
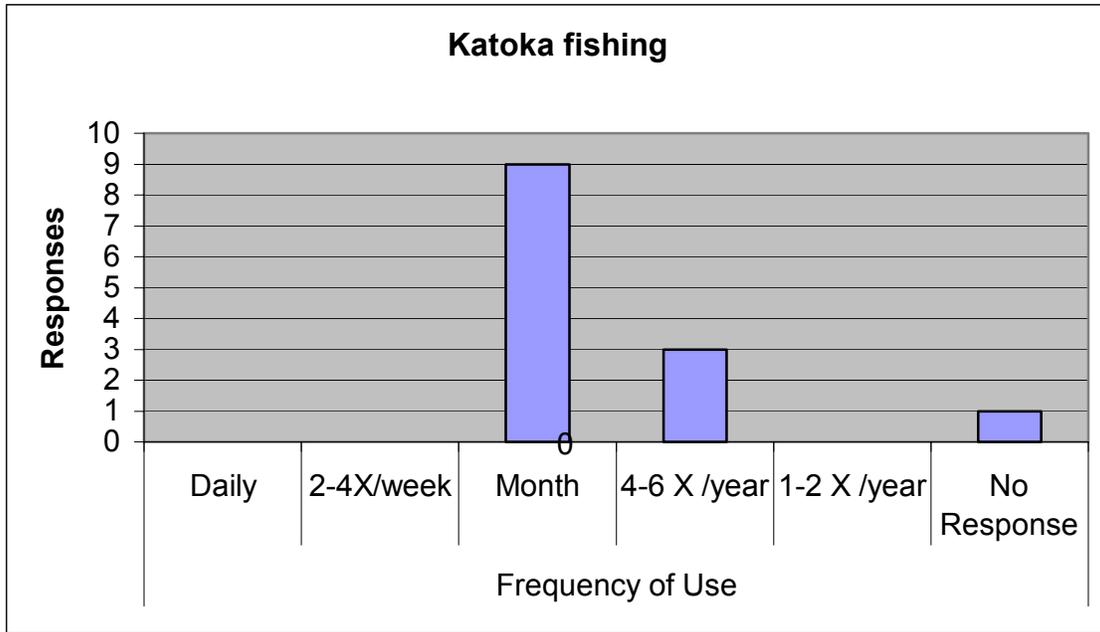
The resources that are caught are yarrow (12) patwa (11) and houri (11) see **graph**.



INTENSITY

The waypoints that were collected are concentrated in the bush areas (13). All of the sites visited were active.

The main methods used for fishing were bow and arrows (13) hook and line (13) and cast nets (1). Most fishing at the sites is done monthly (9). **See graph**. The catch is mainly more than fifty (10). **see graph**.



All of the sites are used for domestic consumption only.

THREATS

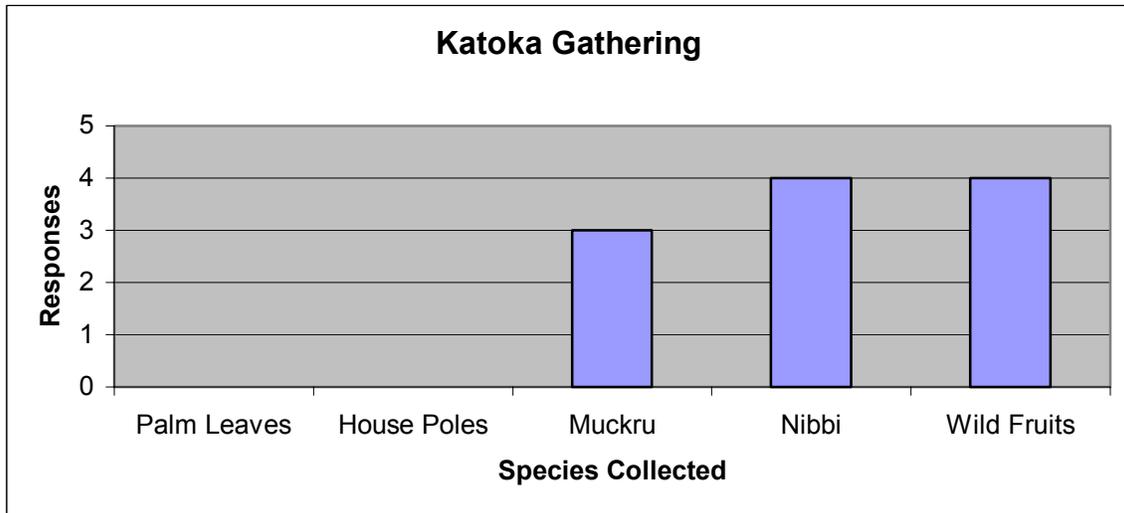
There were no threats recorded at any of the sites that were visited.

GATHERING DATA RESULTS

QUALITY

The condition of the gathering resources was recorded as “excellent” (10).

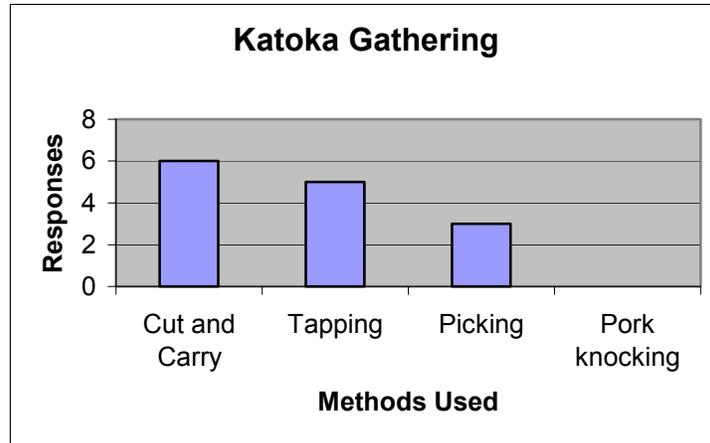
The resources collected are wild fruits (4) nibbi (4) and muckru (3). **See graph**



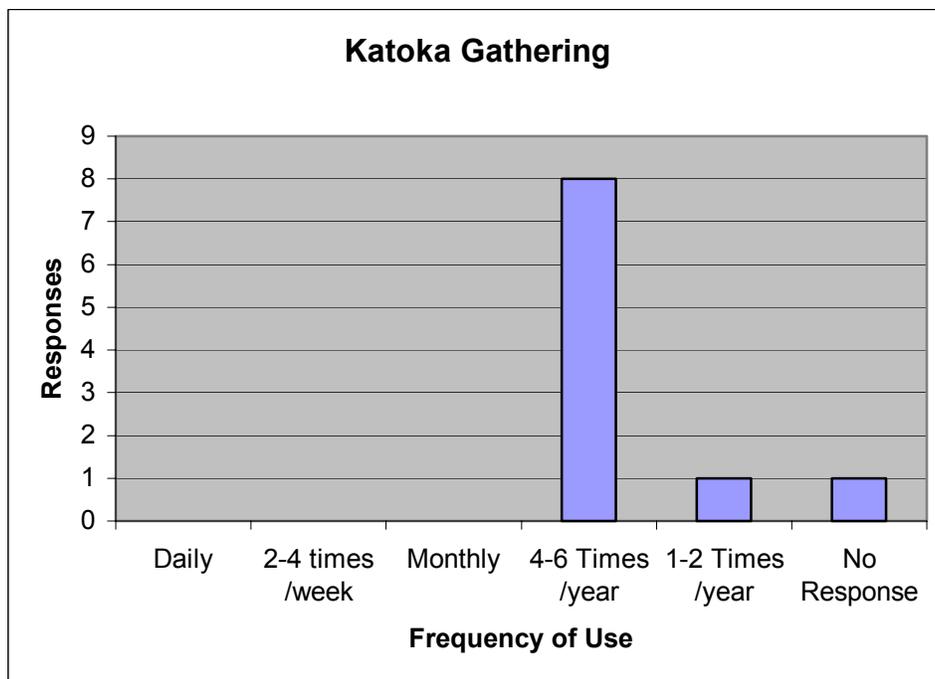
INTENSITY

The gathering sites that were geo-referenced were concentrated up the mountain (5) and in the bush (5). All of the sites visited are actively used.

Cut and carry (6) tapping (5) and picking (3) **see graph** are the methods used in these areas to harvest gathering resources.



Gathering is done mainly done 4 – 6 times per year (8) See graph. Nine (9) of the entries were used for domestic purposes only.



THREATS

There were no threats recorded at any of the sites.

VILLAGE SURVEYS

INTRODUCTION

The village fieldwork was done over four days during the same period that “the bush teams” were doing field observation of resource use sites. The fieldwork focused on two main exercises- collecting surveys and conservation stories. The questions in the surveys were based on three specific areas (1) **threats** (2) **the quality** and (3) **availability of resources** in the village.

The participants were fully involved in every aspect of the village survey. The exercise began with a mini lecture on surveying methods. This was followed by the creation of a village sketch map from which the participants selected households to be interviewed. Each household was informed the day before and given the option to take part in the survey. The exercise ended with the compilation of the results that were gathered in the field.

For the completion of these exercises the participants worked in teams each of which was headed by a CI staff member or a Community Coordinator.

In addition the village work had several other objectives:

- To provide general information to a *wider* representation of the village.
- To allow villagers to ask questions related to the CRE, Protected Areas or CI and have them answered
- To involve the school in an activity during the CRE

Katoka Village Team



Natalie (CI), Alvena, Thomas,
Randolph
Maggie (CI), Wilfred, Marvin,
Darrel, James
Susan (CI), Kevin, Sampson,
Grinneson, Rodwell John,
Desmond, William Daylite,
Victor, Norma, Francisca

- CI's role
- Protected Areas
- The CRE

INTRODUCTION

The village survey activity was expanded after the pilot CRE to include more people in the community. Fifty-nine surveys were completed in Katoka, covering a wide area of the village households.

The Capybara and Sambora areas, which are situated in the North East of Katoka, about one-two hours by bicycle, were also included in the survey. A small team spent one day in these areas conducting a Mini-Meeting in which short presentations were made on:



Village team members sharing information with the elderly folks

After the presentation questions were asked and answered and surveys were conducted. In total 17 surveys were collected in Capybara and Sambora.

All together the team collected 76 surveys.

Sambora & Capybara Village Team



Natalie (CI)
Touchau Michael
Gibson

OBSERVATION:

The Katoka villagers were more aware of CI's role, the CRE and Protected Areas, because of the Pilot.

They were also showed a clear awareness about the need to conserve the area around them as well as about the threats to their resources.

The members of the village team participated well, sharing their views and ideas to collect information. The majority of the villagers answering the survey questions were male. Villagers explained that the husband or father is considered the spokesperson for the household.



Village team members compiling data gathered during the village survey

VILLAGE SURVEY DATA RESULTS

Over a two-day period the fieldwork was conducted for the village survey. The village survey was an informal information gathering exercise. The households that were identified on the village sketch map by the participants were visited and surveyed.

PROFILE

THE ARTISTS WHO CREATED THE MASTER RESOURCE USE

Whilst the “Village Team” was out doing surveys and collecting stories from the village, Gibon Marco created the Master Resource Use Map.

He first used pencils to draw on all the resources, roads and the village and then painted it with water paints.



Working on the master map

For many people in the community, it was the first time that they had taken part in a Resource Use survey of this type. As a result they were asked to respond to questions and sections with which they were most comfortable. In some cases, for example, women did not feel comfortable to answer questions as related to hunting even though they may accompany their husbands and actively hunt.

Therefore the number of responses in some sections may vary.

The results of the village survey exercise are presented in this section of the report. The information is presented in the forms of tables. The tables are used to show the main threats, the intensity and quality of the resources.

The information is presented in the three resource use categories, farming, hunting and fishing and gathering.

VILLAGE SURVEY DATA SUMMARY

In total 76 surveys were collected. The following is a summary of all the data that was collected in each of the three resource categories:

- **Farming** 76
- **Hunting** 35
- **Fishing** 70
- **Gathering** 64

FARMING DATA RESULTS

INTERVIEWEES INFORMATION

Age

15-28	29-40	41-55	Above 55
15	29	23	9

Gender

Male	Female	Not Stated
52	21	3

INTENSITY

During the village survey, most of the people who were interviewed said that they farmed at the bush mouth (56). Farming is also done in the deep bush (18), in the bush (8), up the mountain (7), at the mountain foot (3) and in the savannah (2). Some people said that they farmed in bush islands and up the river. There are two community farms plots in the village in which all community members are engaged, in addition to their own private plots.

Where is your farm?

Savannah	Bush	Bush Mouth	Deep Bush	Mountain Foot	Up the Mountains	Other
6	8	56	18	3	7	2

Farms are visited regularly mostly weekly (29) or daily (24). Some persons said that they visit their farms three times a week (11), 2 times a week (8), 4 times a week (1), monthly (1) and seasonally (1). **See table**

How often do you visit your farm?

Daily	2 x Week	3 x Week	4 x Week	Weekly	Monthly	Seasonally
24	8	11	1	29	1	1

The majority of responses (47) to the size of the farm, as reflected in the “other” response box were given as either “small” or “medium” sized. Small farms generally refer to farms that are approximately less than one acre and medium farms tend to be between 1 –2 acres. The farms of twenty-one persons were between 2-4 acres. **See table**

The produce from most of the farms (21) are used for both domestic and sale purposes. Three (3) persons said that they use their produce for domestic consumption only and two persons said that they use the produce (2) for sale purposes only.

How big is your farm?

< 1 Acre	1>2 Acre	2-4 Acre	5 Acre and more	Other
0	3	21	5	47

THREATS

Wild animals (58) and acoushi ants (34) were felt to be the two main threats to farm crops. Other threats that were given include caterpillars (5), weather (4), domestic animals (3), monkeys (3) and weeds (2).

What are the threats to your crops?

Wild animals	Acoushi ants	Weather	Caterpillar	Weed	Monkey	Domestic animals	Other
58	34	4	5	2	3	3	6

HUNTING DATA RESULTS

INTERVIEWEES INFORMATION

Age

15-28	29-40	41-55	Above 55
8	12	13	2

Gender

Male	Female
33	2

QUALITY

Twenty-six (26) persons who were interviewed said that they had to go further to hunt than they did in the past. Six (6) persons said that there had been changes in the availability of resources. Some persons commented that the population increase, fire and less game for hunting are the changes that they are seeing.

Has there been a change in the availability of resources?

Yes	No	No Response
6	0	29

INTENSITY

Most people said that they hunt in the deep bush area (23). **See table** Hunting is done in these areas mostly monthly (10), other (9), weekly (7) and seasonally (5). **See table**

Where do you hunt?

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain	Deep Bush	Other
0	4	3	2	1	23	1

How often do you hunt?

Daily	2 x Weekly	Weekly	Monthly	Yearly	Seasonally	Other
1	1	7	10	2	5	9

It was said that hunting is done using mostly traditional methods, such as bow and arrows (23) and the use of hunting dogs (3). The game that is caught is used mainly for domestic purposes (18) and for both sale and domestic use (15). Two persons said that they use the game that is caught only for sale.

THREATS

The main threats to the hunting sites were felt to be the weather (10), the increase in the population (8), over-hunting (7) and the presence of outsiders (6).

What are the threats to your hunting resources?

Over-Hunting	Poison	Weather	Outsiders	Fire	Population	Other
7	0	10	6	0	8	2

FISHING DATA RESULTS

INTERVIEWEES INFORMATION

Age

15-28	29-40	41-55	Above 55
14	29	20	7

Gender

Male	Female	Not stated
52	15	3

QUALITY

Forty-six (46) persons said that they had to go further to fish than they did in the past. Thirty-nine (39) persons said that they felt that there had been a change in the availability of the fishing resources. There were several comments that were made: that the fishes are no longer as plenty as before, fishing has become more intense in the community, some ponds and creeks are drying up which never happened in the past. Many persons also referred to the increase in the population as a reason for the change.

INTENSITY

The main hunting area that is used by the persons who were interviewed was the deep bush area (17). The following areas are also used: in the bush (1), in the savannah (7), at the mountain foot (5), at the bush mouth (4) was used. The majority twenty-seven (27) did not respond. **See table**

Where do you fish?

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain	Deep Bush	Other	No Response
7	4	7	5	0	17	3	27

The persons who were interviewed use the following methods of fishing: hook and line (66), bow and arrows (34), seine (27). Cast net (3) and poison (1) are also used. Fishing is done mostly on a daily (25) and weekly basis (20). **See table**

How often do you go fishing?

Daily	2 x wk	Weekly	2 x Monthly	Monthly	Yearly
35	1	20	3	3	8

The catch is used mainly for domestic use only (30) or for both domestic purposes and sale (37). Some people said that they only catch fish to sell only (3).

THREATS

The major threats to fishing sites were given as poisoning of fishing areas (14), the use of resources by outsiders (11), the increase in the population (9), new methods of fishing (9) and over fishing (8).

What are the threats to your fishing resources?

Over fishing	Poison	Population	New Methods	Other	Outsiders	No Response
8	14	10	9	7	11	14

GATHERING DATA RESULTS

INTERVIEWEES INFORMATION

Age

15-28	29-40	41-55	Above 55
13	25	20	6

Gender

Male	Female	Female
51	10	3

QUALITY

Twelve (12) persons who were interviewed said that they had to go further to gather materials than they did in the past. Thirty-one (31) persons responded that there had been changes in the availability of resources while thirty persons (30) felt that there hadn't been a change. Some of the comments that were made were that it was necessary to go further for resources that were no longer close by such as caramani and nibi. It was also that non-traditional materials were also being used more and more such as zinc.

Has there been a change in the availability of resources?

Yes	No	No Response
31	30	3

INTENSITY

Gathering is done mainly at the bush mouth area (18), in the deep bush (16) and in the bush (15). To a lesser extent people also said that they go up the mountain (5) and at the mountain foot (4). **See table**

Where do you gather?

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain	Deep Bush	Other	No Response
0	18	15	4	5	16	3	3

Most of the responses to the question of how often do you gather, fell under "other" response. These answers include every 4-6 years and "when necessary". Other answers that were given, was that gathering is done yearly (11). **See table**

The resources that are gathered are mostly used in the home for domestic purposes (47), for both domestic purposes and for sale (11) or for sale only (1).

How often do you gather?

Daily	Weekly	Yearly	Every 5 Years	Every 2 years	Seasonally	Other	No Response
1	0	11	7	5	1	30	9

THREATS

The major threats to the gathering resources were listed as over-harvesting (24) and fire (12). Other threats listed are the increase in the population (7), clearing of farms (2), wastage (2), the presence of outsiders (1) and the weather (1).

What are the threats to your gathering resources?

Over-Harvesting	Weather	Population	Fire	Clearing farms	Wastage	Outsiders	No Response
24	1	7	12	2	2	1	18

CLOSING ACTIVITIES

The CRE concluded with a series of activities. The first such activity was a presentation that was made by the village team participants to the school children. This presentation was done to explain to the older school children the work that was done during the workshop it included:

- The resource lists
- The seasonal calendar
- The sketch map
- The results of the village survey



A prizewinner from the school quiz

It was also an opportunity for the participants to share the knowledge that they had with their students, which included the local names of some resources and stories.



Explaining the village survey data to the public

On the last day of the workshop the bush and village teams met after being apart for four days. At this last meeting the two teams used the time together to tell each other of their experiences during the village survey and field observation exercises.

The workshop was closed with a village public meeting. The public meeting was an opportunity to share with the other villagers the work that they had done, their experiences and their knowledge of the mountains, of their resources and of the seasons of resource use. This knowledge was often a real learning experience for other members of the community who may not

have been aware.

The final meeting was done mainly in the local language and the participants themselves did all of the presentations using photos to communicate their experiences.

The participants were also presented with certificates of participation.



Entire participant group with their CRE participatory certificates

RESOURCE USE PROFILE

The resource use profile is an outline of how the village uses the resources based on the information that was collected during the CRE in the **resource discussions, data forms, village surveys** and in the **field observation**. The purpose of the resource use profile is to show:

- **The main areas that are used by the community**
- **The factors that affect the use of the resources**

Katoka is a Macushi community located on the right bank of the Katoka Creek about fifteen miles from Yupukari village up the Rupununi River on the eastern side. The village was geo-referenced at 3.55754°N and 59.29706°W. Katoka recently became administratively independent, electing its first Touchau, Desmond Michael, in March of 2002. Katoka was formerly under the administration of Yupukari, along with the smaller settlements of Capybara and Sambora in the Simoni area. These communities are only a few miles from Katoka, also on the eastern side of the Rupununi. The village is accessed mainly by boat, via the Rupununi River from Yupukari Village. The journey is easiest during the height of the rainy season, when it is possible to boat right into the center of the village. During the dry season, the river can become impassable by boat, making necessary a long (12 miles) overland trip from Yupukari. The transportation difficulties make Katoka and surrounding settlements very much self sufficient and heavily dependent on the natural resources for their daily sustenance. Farming is a daily activity in these communities along with hunting, fishing and gathering.

This report takes into consideration, all the areas that were identified by the community and, particularly the areas that were visited by the “Bush Teams”, in a collaborative effort involving the village participant group and members of Conservation International Guyana team. The Participant group related their resource use via the tools created during the workshop in the areas of:

- Hunting
- Fishing
- Farming
- Gathering

RESOURCE USE “ZONES”

All the communities are located in the savannahs with some situated closer to the mountains than others. Use occurs in different areas with specific characteristics from the savannah to the mountains known by the communities as follows:

SAVANNAH

The savannah areas are the wide-open grasslands with scattered bushes dominated by the characteristic sand paper tree (*Curatella Americana*). There are low land savannahs and high land savannahs that are found in the mountain valleys.

BUSH MOUTH

The community describes this area as where the main savannah land ends and the bush or the forest begins, extending approximately one mile into the bush. The vegetation of this area is

typically secondary growth with the majority being fallow lands or old minabs, as the villagers call them. This term ‘bush mouth’ is used commonly when relating to the activities done within this particular area. For example, if a villager has a farm in this area, he would always refer to it as his/her bush mouth farm. So bush mouth areas generally do not have names unless they are close by a creek or some other natural feature. The bush team observed farm sites at the bush mouth

BUSH

The term bush relates to the area between the end of the bush mouth and where the mountain foot area begins. The extent of the bush size varies in each community, depending on the amount of forested area between the bush mouth and the mountains. In communities with extensive bush the far areas are referred to as the ‘deep bush’. The deep bush is not usually farmed, but is used for hunting, gathering or fishing activities. The vegetation of the bush is mainly primary forest with minimum canopy opening due to minimal human impact. Areas observed and geo-referenced included: **Simoni Creek, Black Water Creek, and Calabash Creek.**

MOUNTAIN FOOT

This area lies within a mile range before the mountain slopes. The mountain foot areas are very fertile with a cooler climate and very favorable for crops. Communities that are located closer to the mountains prefer to use mainly these areas for farming. From the farms access is gained to the surrounding areas as well as up the mountains for resource use. Access to the mountains requires passage through the mountain foot. **Bamboo Creek** are areas geo-referenced at the mountain foot.

UP THE MOUNTAIN

This refers to all the areas beyond the mountain foot, up and into the mountains. All mountain areas are very rich for resources such as nibbi, caramanni, balata, medicine and game due to the forest being untouched. Hunting is the primary activity up the mountain due to the abundance of game animals with some amount of gathering carried out at the same time. Among the areas observed and geo-referenced were: **Bamboo Mountain.**

Main activities are generally carried out in the following areas:

- **Farming – bush mouth, bush, creeks banks**
- **Hunting – main rivers, creek, mountains**
- **Gathering – mountains**
- **Fishing – main rivers, creeks**

QUALITY

The results shown from the village survey data and bush data along with the bush reports indicate that Kadoka’s resources are all in excellent condition. The soils of the farming grounds along the bush mouth and deep bush where farms are concentrated produce good yields. The main soil types closer to the mountains are of a loamy and clayey texture. These areas include **Tuba, Blood and Mapari Mountains** where the soils are found to be richer than the bush farms.

The same areas were used during the balata days. The main staple food, cassava, along with other main crops like yams, eddoes, and sugarcane grow well and produce proper yields. Also many large citrus fruit orchards flourish in these parts. When they start to bear the fruits attract a lot of wild life making the orchards good hunting sites.

As was observed by the bush teams, Katoka’s forests are very much intact. Luxuriant Mora forest exists in the area. In these forested areas many game animals can be found as was indicated by the many tracks seen during the bush trips. The most obvious were the peccaries, agouti, bush deer, tapir and powis. So basically the hunting resources of the communities are in excellent condition and the peoples way of hunting is still dominated by the traditional ways such as bow and arrows and hunting dogs.

The results of the bush trips also show that many of the gathering resources like muckru, herbal medicines, and house materials exists in abundance and can still be obtained from the forest in the vicinity of the farms.

However it was revealed by the village survey that certain important species are scarcer now, such as soft wood, a very ideal house material, and the arapaima and river turtles. It is also stated that to get quality resources for making special crafts one needs to go to the further areas up the mountains.

INTENSITY

Katoka	Use Zone				
	Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain
Farming	0	0	6	0	0
Hunting	0	0	12	1	1
Fishing	0	0	13	0	0
Gathering	0	0	5	0	5

The above table shows the areas or “zones” the bush team visited, and the number of geo-referenced points recorded in each one.

The majority of farms of Katoka along with Capybara and Sambora are located in the bush along the **Simoni, Marunawaina, Katoka, Rupununi, Mobay-wiiti, and Aruwa Creeks**. These places are very rich and are used for mainly mixed crops. Most of the farming grounds in use today are very old such as the **Katoka, Tuba, Mapari, Aruwa Creek** area and upper Rupununi River. These sites are all located within the bush areas. The Tuba and Mapari area were farmed during the balata days to supplement the bleeders ration during the bleeding season. This was a very big industry, especially during World War II up until the 1960’s that provided jobs for the local people every season and brought in foreign currency for Guyana. This activity was done in the foothills of the Kanuku Mountains and other forests through out Guyana. The extracted latex was use for submarines and telephone cable insulation, manufacturing golf balls and other minor industrial uses, varying from machine belting to flax spinning rollers. After the industry came to end when synthetic materials replaced balata, the bleeders return to their homes abandoning their farms in these areas.

However because the farms closer to the village are not producing good yields any longer due to the soils becoming exhausted, the people are going deeper into the bush heading towards the mountains again. Also some amount of balata bleeding has restarted to accommodate the Nappi Balata Artisans and other small markets.

Since farming is vital to the daily sustenance of the people it is an everyday activity and is done on a fairly large scale with the farms having sizes ranging from two to five acres and a few more than five. Most of the farms are propagated with mixed crops and are use solely for domestic consumption with a minimal number as both domestic and for sale.

Within the immediate surrounding areas of the farming grounds, hunting, fishing and gathering are also done on a regular basis when the people are spending some time in the farms. However there are times when the mountains are visited to do mainly hunting and gathering. There are more plentiful resources up the mountain than in the bush areas that are used more regularly.

As was mentioned earlier, there are specific locations where one needs to go for special resource needs. These places are found in the furthest areas that are not visited very often. Sites mentioned were the **Simoni Creek**, a main hunting and fishing ground. Another is **Bamboo Mountain**, where caramanni, resin extracted from a tree to use in the making of arrows, and other crafts, is found. The Bamboo Mountain area is also visited to collect special medicinal plants.

The villages of Yupukari and Sand Creek use the same furthest areas for hunting, fishing and gathering, especially the Mapari Creek and Mapari Mountain.

THREATS

The main threats to the resources of Katoka include;

- Fire, especially during the dry season due to fire escaping when farms are being burnt. A lot of gathering resources are destroyed when the fires become uncontrollable and also animals are chased away from the banks of the Rupununi River.
- Farm crops are damaged by wild life of which wild hogs are the biggest threat. The most common farm pests are the acoushi ants that cut the plant's leaves.
- Over hunting was also stated as a threat that greatly reduces the available game and causes hunters to go further for this activity. Species notably scare now are the deer and mata-mata turtles.
- The use of the fish poison also poses a great threat to the fish population.
- The act of cutting down the caramanni tree to extract the gum was also stated as not sustainable.
- Another threat, that is not so prevalent now because of difficult access, is outsiders who come in to poach on the species that are disappearing like the arapaima and mata-mata turtle.

SITE GEO-REFERENCE POINTS

The table below shows the sites observed and geo-referenced during the CRE Bush Team fieldtrips. The readings were taken with Global Positioning Units (GPS). Heavy clouds or tree cover can make it difficult to get a perfect reading, so all geo-references should be considered approximate, generally within 25 meters. This is part of the information recorded by the participant team members while observing resource use sites. The site names are spelled in the table, as the team recorded them, so there is sometimes more than one spelling for the same site. The following information is listed:

- **Site Type**-this allows what type of resource use happens at this site. Some areas are multiple use, that is, more than one type of resource is used, so this type of site is listed for each resource use checked on the data form
 - **F = Farming**
 - **H = Hunting**
 - **FS= Fishing**
 - **G = Gathering**
- **Village** – location of site.
- **North** – the North or latitudinal reading. This number is shown in “decimal degrees”, or how many degrees North of the Equator (0°) the site is located.
- **West** – the West or longitudinal reading. This number is given in “decimal degrees” showing how many degrees west of the Prime Meridian (0°) the site is located
- **Area Name** – the name of the site as recorded by the teams on the data form. When the site had no specific name this line is left blank.
- **Site Zone** – the “zone” or geographic location of the site. At times one site name applies to several zones, as a creek that may flow from a site “Up the Mountain” all the way out into the savannah.
 - **Savannah**
 - **Bush mouth**
 - **Bush**
 - **Mountain Foot**
 - **Up the Mountain**

Site Type	Village	° North	° West	Area Name	Zone
F	KT	3.54453	59.22314	Yarrow Creek	Bush
F	KT	3.44181	59.15839	Yarrow Creek	Bush
F	KT	3.554459	59.22317	Yarrow Creek	Bush
F	KT	3.54454	59.22319	Yarrow Creek	Bush
F	KT	3.52298	59.16772	Yarrow Creek	Bush
F	KT	3.54454	59.22314	Yarrow Creek Banana Bush	Bush
FS	KT	3.53124	59.17722	Black Water Creek	Bush

Site Type	Village	° North	° West	Area Name	Zone
FS	KT	3.53132	59.17729	Black Water Creek	Bush
FS	KT	3.52806	59.16776	Black Water Pond	Bush
FS	KT	3.52307	59.16776	Black Water Pond	Bush
FS	KT	3.44181	59.15839	Simoni Creek	Bush
FS	KT	3.53929	59.19379	Simoni Creek	Bush
FS	KT	3.42670	59.15556	Simoni Creek	Bush
FS	KT	3.47218	59.16132	Simoni Creek	Bush
FS	KT	3.44172	59.15821	Simoni Creek	Bush
FS	KT	3.52843	59.18016	Simoni Creek	Bush
FS	KT	3.53962	59.19397	Simoni Creek	Bush
FS	KT	3.52285	59.16763	Simoni Creek/Black Water Pond	Bush
FS	KT	3.53912	59.19376	Yarrow Creek	Bush
G	KT	3.53124	59.17722	Black Water Creek	Bush
G	KT	3.53132	59.17729	Black Water Creek	Bush
G	KT	3.47233	59.16144	Simoni Creek	Bush
G	KT	3.43793	59.15676	Simoni Creek	Bush
G	KT	3.44181	59.15839	Yarrow Creek	Bush
H	KT	3.44172	59.15821	Along Simoni Creek	Bush
H	KT	3.53124	59.17722	Black Water Creek	Bush
H	KT	3.53132	59.17729	Black Water Creek	Bush
H	KT	3.52806	59.16776	Black Water Pond	Bush
H	KT	3.52307	59.16776	Black Water Pond	Bush
H	KT	3.53000	59.14000	Calabash Creek	Bush
H	KT	3.53536	59.17468	Hunt Oil Line #25	Bush
H	KT	3.42094	59.15450	Simoni Creek	Bush
H	KT	3.43526	59.15791	Simoni Creek	Bush
H	KT	3.44189	59.15271	Simoni Creek	Bush
H	KT	3.44181	59.15839	Simoni Creek	Bush
H	KT	3.52285	59.16763	Simoni Creek/Black Water Pond	Bush
H	KT	3.43771	59.15700	Bamboo Creek	Mountain Foot
G	KT	3.40422	59.16090	Bambo Mountain	Up the Mountain
G	KT	3.41157	59.15692	Bambo Mountain	Up the Mountain
G	KT	3.41157	59.15692	Bambo Mountain	Up the Mountain
G	KT	3.42098	59.15450	Bambo Mountain	Up the Mountain
G	KT	3.43395	59.15805	Bambo Mountain	Up the Mountain
H	KT	3.40851	59.15807	Bambo Mountain	Up the Mountain

During the pilot when the CRE methodology was still being developed, the following waypoints were geo-referenced by the different teams.

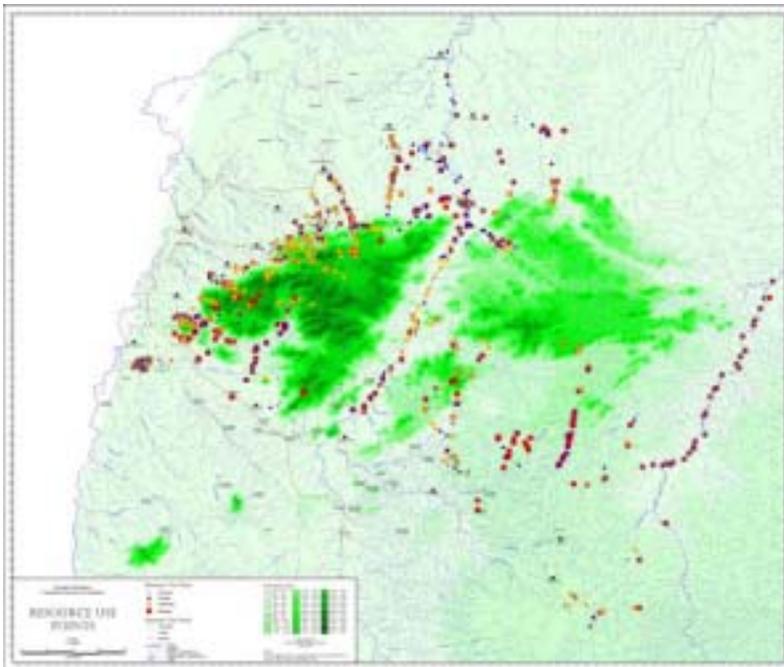
Team B					
Site Type	Village	° North	° West	Area Name	Zone
	KT	3.55477	59.29568	School	
	KT	3.41117	59.31020	Swamp Landing	
	KT	3.38255	59.30935	Katoka Creek Mouth	
	KT	3.36350	59.30843	Cocorite Pond	
	KT	3.33035	59.25482	Mapari Creek Falls	
	KT	3.34037	59.26350	Above Cocorite Pond	
	KT	3.40057	59.31633	Salipenta Landing	
	KT	3.40258	59.31633	Salipenta Camp Site	
	KT	3.40650	59.32095		
	KT	3.40493	59.32057		
	KT	3.40272	59.29898	Tuba Pond	
	KT	3.39020	59.28062	Michael Farm Tuba Mountain Foot	Mountain Foot
Team A					
	KT	3.39018	59.28070	Tuba Farm Camp	
	KT	3.38633	59.25947	Tuba Mountain Top	Up the Mountain
	KT	3.41960	59.23447	Blood Mountain	
Team C					
	KT	3.55465	59.29487	School	
	KT	3.55317	59.27655	Hubert's Farm	
	KT	3.49278	59.25210	In the Bush	Bush
	KT	3.47592	59.24728	In the Bush	Bush
	KT	3.44018	59.22712	Simoni Creek	

THE RESOURCE SITE MAPS

The following maps are digitized, or computer created, representations of the locations of the sites observed during the CRE fieldwork. The locations or “points” appear on a background that shows the area covered during these field trips in each village. This background is based on the official topographic map of Guyana published by the Guyana Lands and Surveys Department in 1964. The positioning of the rivers, creeks, and roads, and many of the place names come from this official map, which is now nearly 40 years old. This is the reason that some of the names on the map may be spelled differently than they are spelled today. Also some other features may have changed, such as the location of roads, or even smaller creeks, which may have changed direction or ceased to flow.

The readings or geo-reference points taken at each site with the Global Positioning Unit (GPS) are transferred to a computer, which also contains the sections of the official map with the information on the Kanuku Mountain area. A computer program called “ArcView” places the points on the map according to the position recorded by the GPS when the bush team members took the reading.

There is a separate map for each resource category as well as a combined map that has all the readings taken during the CRE. It is important to remember, when viewing the maps, that they represent only a record of sites observed during specific trips made during the CRE. These maps do not show every area a community uses, but show the sites along the routes chosen by the teams to reach, as far as was possible, the furthest areas of community use, and the most important use areas.

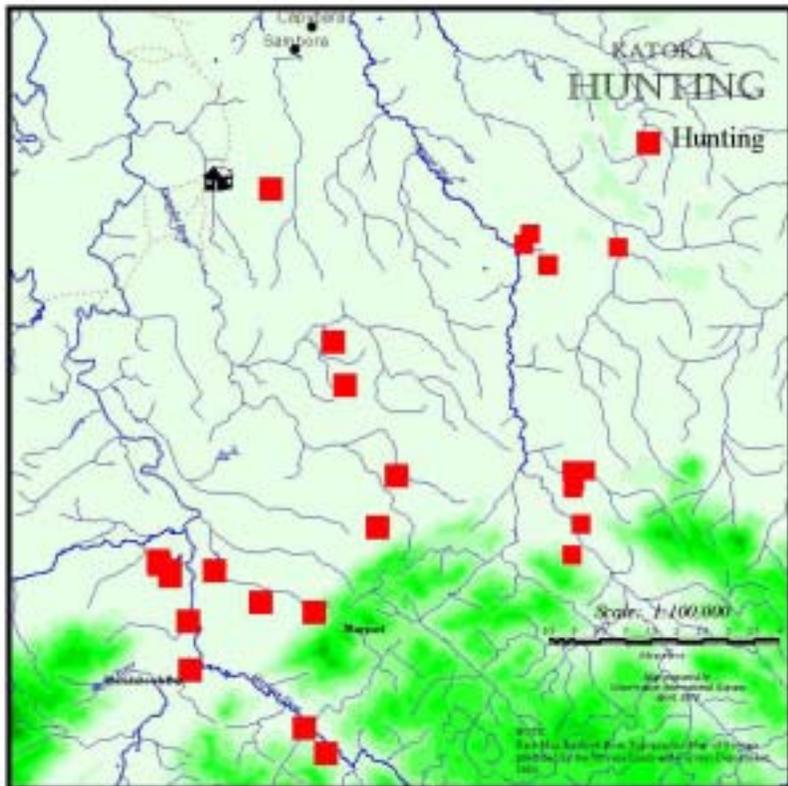
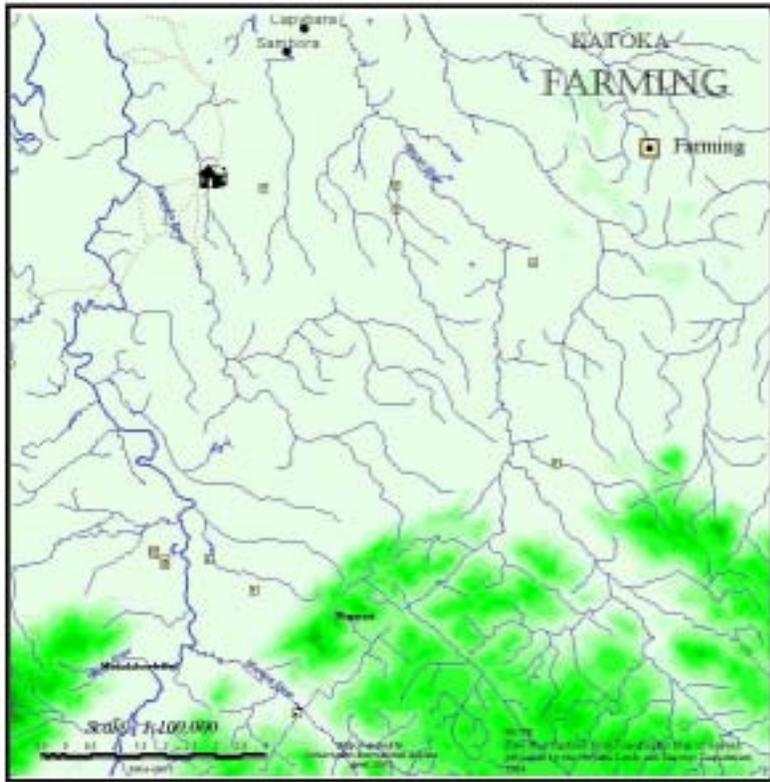


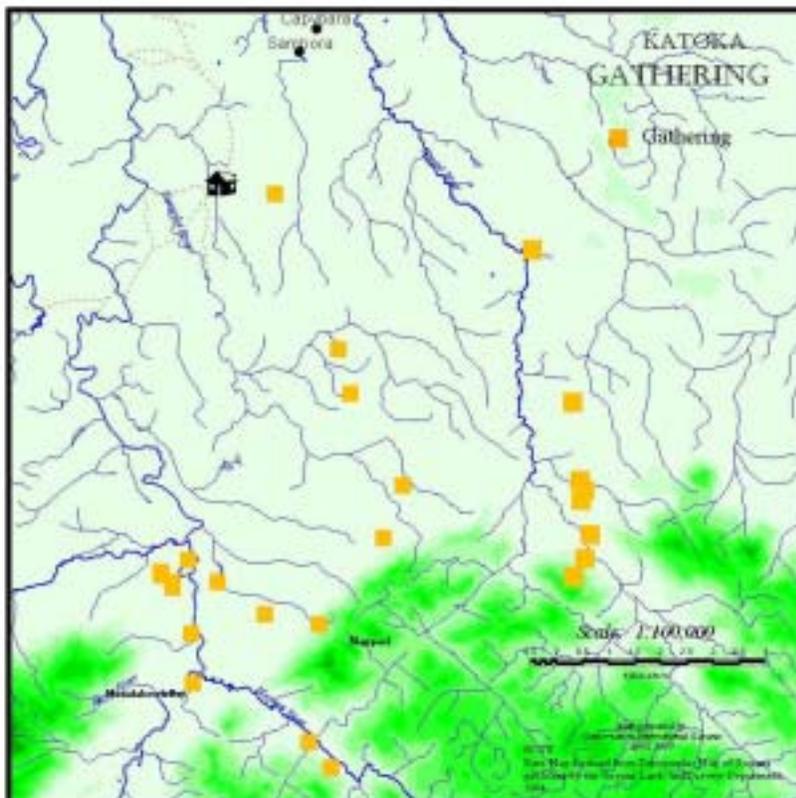
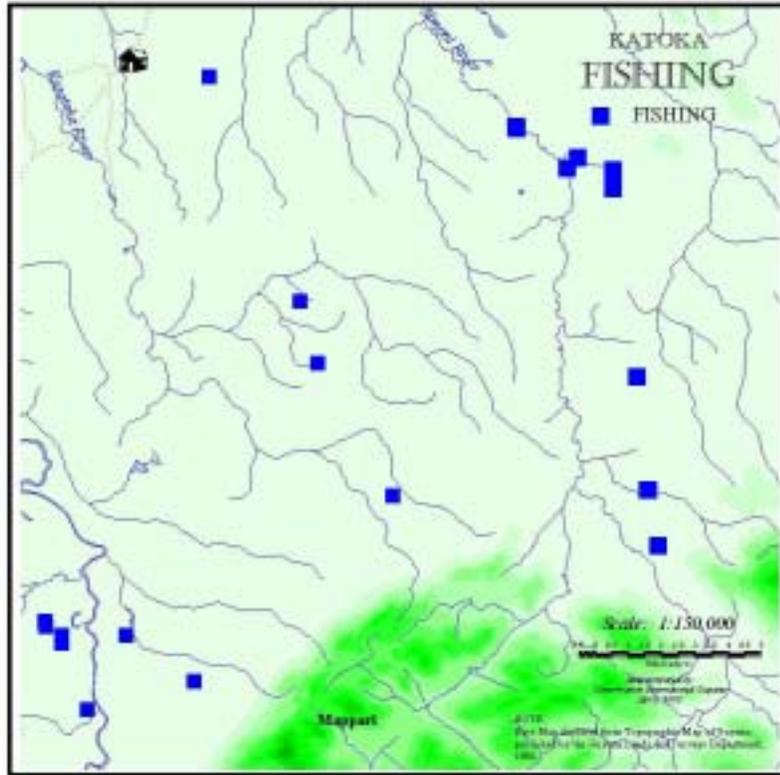
In some cases, flooding prevented access to some areas, especially those normally reached via creeks. In this case, readings were taken at a creek mouth, to record the area, while the use is described in the report.

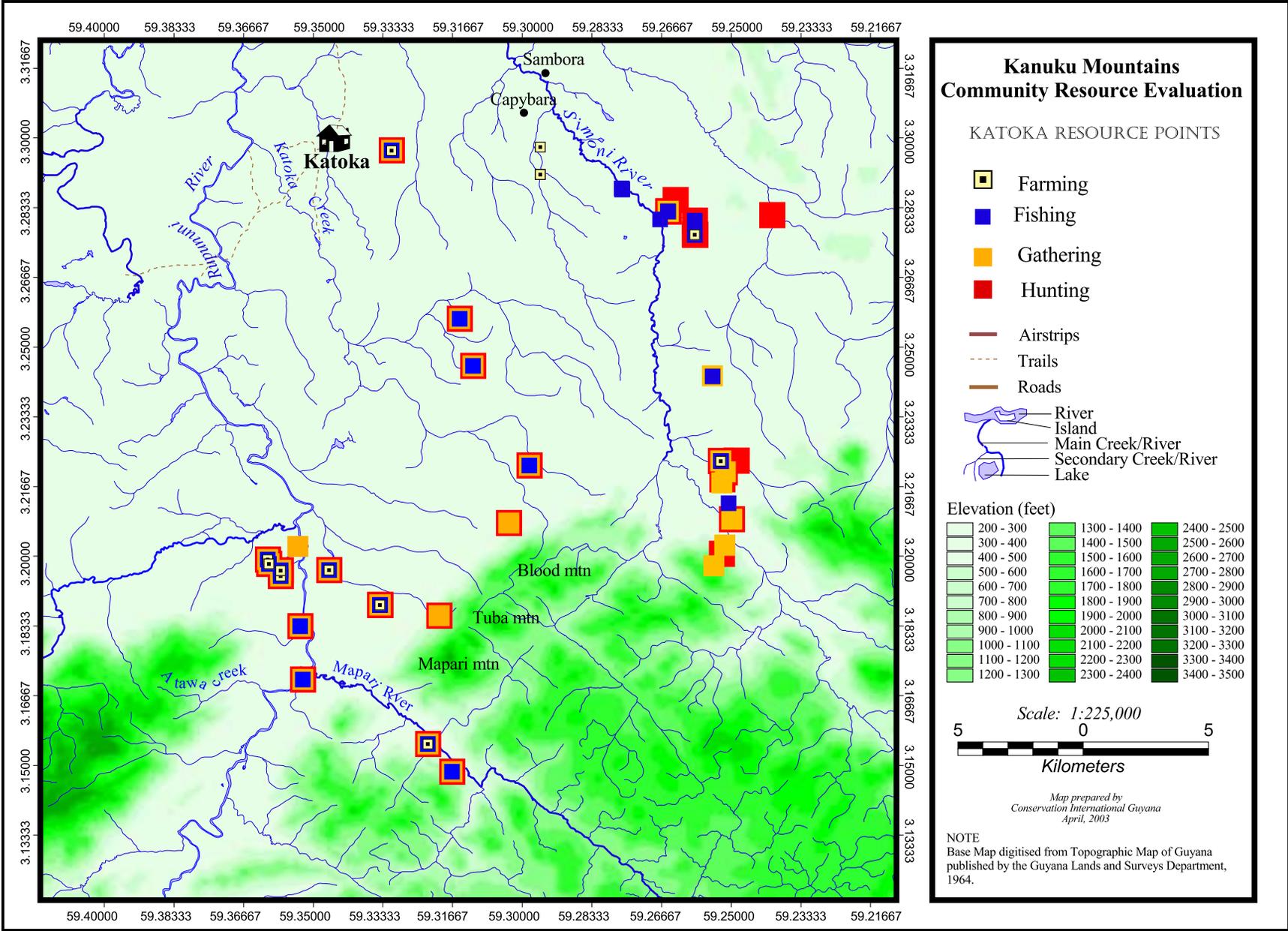
In order to have a complete understanding of the resource use areas, it is important to study the resource sketch maps along with the formal digitized maps. It is the sketch maps that show all the areas recorded by the CRE participants as representing their resource use.

As part of the CRE project, a digitized map of the entire

Kanuku Mountain Range was also produced in the same way that the individual village maps were produced. This map shows all the resource point readings (1, 376) taken during all the CRE workshops. Again is important to note that the Kanuku Mountains map is a record of the results of the 47 field trips made during the CRE's.







CONCLUSION



Reviewing the resource points on the small maps, Quarrie.

This information is now in a database, which is a computer program that organizes information in a way that it can be read and studied. This database of information will be used to help decide about the best type of protected area to propose for the Kanuku Mountains. It is also a valuable tool for the communities to use in communicating their resource use patterns.

In addition to this report, each village will receive a copy of all the data forms filled out on the bush trips, and all the surveys and evaluation forms completed during the CRE and Results workshops. The information will also be available to members of the communities at Conservation International's Lethem field office.

Copies of the village reports will be given to those government entities, and donor agencies involved in the protected areas process in Guyana including:

Environmental Protection Agency
Lands and Surveys Department
Forestry Commission
Minister of Amerindian Affairs
Regional Democratic Council
Office of the President
United States Agency for International Development (USAID)
The World Bank

The Community Resource Evaluation Workshop was a learning experience for all involved. A great quantity of information was gathered and shared by the community participants. The results of the fieldwork and the draft copies of the resource site maps were returned to community for feedback and verification during a workshop in March 2003. Feedback and corrections were incorporated into the final report.



Explaining the results of the village survey data, Parikwarinawa



Verifying the seasonal calendar, Rupunau.



Reading their CRE reports, Maruranau.

APPENDICES
APPENDIX 1
Typical Activity Schedule

<i>DATE</i>	<i>ACTIVITY(S)</i>
Day 1	<p><u>A.M</u> ☞ Arrival ☞ Meeting with Touchau/Council</p>
Day 2	<p><u>A.M</u> ☞ Public Meeting</p> <ul style="list-style-type: none"> • Defining Concepts • The Protected Area Process • Presenting the CRE <p>☞ Participant Meeting</p>
Day 3	<p><u>A.M.</u> ☞ Introductions ☞ Community Participation ☞ Creating Resource Focus Groups</p> <p><u>P.M</u> ☞ Creating Resource List: <i>The What</i></p>
Day 4	<p><u>A.M.</u> ☞ Seasonal Resource Use Calendar: <i>The When</i> ☞ The Village Resource Use Sketch Map: <i>The Where</i> ☞ Discussion: Resource Use Methods, Availability and Threats: <i>The How</i> ☞ Group Presentations</p>
Day 5	Activity Break
Day 6	<p><u>A.M.</u> ☞ Field Work Preparation</p> <ul style="list-style-type: none"> • Finishing of Maps • G.P.S. Training/ Where am I on the face of the Earth. • Discussion of goals and objectives of fieldwork • Identifying Teams • Mini-Lectures • Planning the fieldwork <p><u>P.M.</u> ☞ Bush Team: Prepare for Departure</p>
Day 7	<p>Village Team: <u>A.M.</u> ☞ Bush Team Departs ☞ Village Team</p> <ul style="list-style-type: none"> ○ Prepare for surveys ○ Create Village Map ○ Review survey
Day 8	<p><u>A.M.</u> ☞ Village Surveys and stories ☞ Video Show at school and quiz</p>
Day 9	☞ Continue with village surveys and interviews
Day 10	<p>☞ Bush Teams returns ☞ Village Team</p> <ul style="list-style-type: none"> • Compile Interview Results • Prepare Presentations

APPENDIX 2

Team Profile

Natalie Victoriano (Macushi Interpreter):

Natalie is originally from Kumu village. She has worked with CI for two years. Before joining the organization she was the Women's Group Leader, Church Assistant and a Village Councillor.

Initial Role: Macushi Interpreter

Current Role: Interpreter

Facilitator

Lead Village Team Activates

Asst. Purchasing Manager

Natalie has participated in 10 CRE's. Her role in the team includes:

- Interpreter
- Facilitator
- Focus Group Leader
- Lead Facilitator Village Team
- Kitchen Manager

Natalie assists Margaret Gomes in purchasing supplies, taking responsibility for all medical/first aid supplies. She assists in supply inventories and maintains supply list and menus on the computer using MS Word. During the activity Natalie managed the kitchen and the preparation of over 300 meals and all rations for the bush teams. As Village Team leader, Natalie facilitates all Village Team Activities, including:

- The village sketch map
- Village survey
- Preparation of participants for the student and public meeting presentations
- Student interactions

Natalie has also lead Bush Teams for the Katoka Pilot and the Maruranau CRE.

Richard Wilson (Indigenous Knowledge Advisor):

Richard Wilson has worked with CI- Guyana for two years. He is originally from Rupunau Village where he was once a Touchau.

His role in the CRE included acting as an:

Interpreter

Facilitator

Bush Team Leader

Richie has completed 10 CRE's. His role on the team includes:

- Wapishana Interpreter
- Facilitator
- Bush Team Leader
- Focus Group Leader

Richie assists in logistics for launching the CRE activity. He provides interpretation CRE activities in Wapishana communities. As Bush Team leader, he assists in training participants in GPS use and data collection. Richie has lead 9 Bush Team trips covering approximately 440 miles over 37 days, training 46 participants. Richie has acquired skills in digital photography, GPS, and operation of audio/visual equipment.

Andrew Demetro (Indigenous Knowledge Advisor):

Andrew Demetro is from the village of Nappi where he served as Touchau for 8 years. He has been working with CI-Guyana for more than ten years.

During the CRE he served as:

- Co Facilitator
- Interpreter
- Bush Team Leader
- Lead Advisor-Bush Teams
- Lead Indigenous Advisor-Planning Team

Andrew served as co-lead facilitator for CRE activities, as lead for the Bush Fieldwork, and as Macushi interpreter. As a Bush Team Leader, during the CRE activity Andrew participated in 9 CRE's and served as lead implementer for three additional data gathering field exercises. He has led 9 Bush Team trips of approximately 600 miles and 41 days duration. As a member of the technical team in the Lethem office, Andrew advises on community relations and methodology design for community activities. New skills acquired:

- Methodology design
- Facilitation
- Training

Use of GPS and Digital Photography

Nial Joseph (GIS/IT Technician):

Nial is originally from St. Ignatius but lives in Lethem. He has been working with CI – Guyana for two years.

During the CRE his role was as:

- IT and GIS Technician
- Overall Field Technical Lead-Responsible for all technical equipment
- Technical Lead for Team
- Facilitator
- Bush Team Leader

Nial has participated in 10 CRE's. His role for Team A includes:

- Focus group leader
- Bush Team leader.
- Facilitator for Mapping Mini lecture and GPS training
- Technical lead (responsibility for equipment, video shows, photo management, onsite design and presentation of closing photo show)

Nial is responsible for all GIS work related to the CRE fieldwork. He is responsible for downloading all waypoints from GPS units, maintaining files and liaising with the GIS specialist in Georgetown. Nial manages the mapping software and the flow of data to and from Georgetown.

Responsibilities also include issuing of all equipment in preparation for each CRE activity. Nial has acquired skills in MS Word, PowerPoint, Arc View, OziExplorer, and Camedia Photo Management, in addition to technical skills in IT support. Nial trained both in Georgetown, Lethem, and Washington, DC. as IT support for all computer equipment in the Lethem office.

Nial led 9 Bush Team trips with over 45 participants and 35 days duration covering over 600 miles.

Lloyd Ramdin (Agriculture Advisor):

Lloyd is originally from the Upper Essequibo and has been working for CI for nearly two years.

During the CRE he worked as:

Bush Team Leader
Training
Materials Manager

Lloyd has participated in 9 CRE's. His role for the team includes:

- Focus Group leader
- Bush team leader
- Mini-lectures on soils for participants and students
- Technical assistant on photography and video

Lloyd is responsible for the production of all printed materials for the CRE activities, having acquired skills in MS Word, Publisher and PowerPoint. He co-designed a three-day training program for community field team leaders in CRE methodology, data gathering and GPS use. He also designed and presented presentations for participants and students in agricultural topics. Lloyd has led 9 Bush Team trips with 48 participants over 36 days and more than 600 miles.

Margaret Gomes:

Margaret is originally from Aishalton and now lives in Sand Creek. Before joining CI she was very involved in the community, in the church, women's group, the PTFA and SCIPDA.

During the CRE her role was as:

Facilitator
Village Team Leader
Overall Purchasing Manager

Margaret has participated in 9 CRE's. Her role in the Team includes:

- Wapishana interpretation
- Facilitator
- Lead Facilitator Village Team Activities
- Focus Group Leader
- Kitchen Manager (supervising preparation of 300 meals during the activity)

Maggie is responsible for all supplies-food and stationery-for all CRE activities. She inventories, buys, distributes all supplies, manages and accounts for purchasing funds, and supervises all packing of supplies for both teams for each activity. During the CRE Activity, Maggie takes the role of lead facilitator for the Village 'Team activities, including:

- The village sketch map
- Village survey
- Preparation of participants for the student and public meeting presentations
- Student interactions

Maggie has acquired skills in purchasing and inventory management, use of calculator, bookkeeping and cash management. She also led a Bush Team during the Katoka Pilot CRE.

George Franklin (Regional Coordinator)

George has been working with CI – Guyana for over ten years. During the CRE his role included the following:

- Facilitator
- Logistics
- Village Team Leader

Susan Stone (Program Manager):

Susan is from California, USA. She has been working with CI-Guyana for three years. Her first year was spent living in the village of Nappi where she worked along with the Nappi Balata Artisans.

As the Program Manager, Susan has overall responsibility for the CREs, which includes:

- Management
- Recruitment
- Planning
- Design
- Implementation
- Budgeting
- Evaluation and Reporting

In total she has participated in 9 CRE exercises. In the CRE she served as the lead facilitator for the team. In addition she oversaw the logistics of the activity, the bush team and the village teamwork.

Date <table style="display: inline-table; border: none;"> <tr> <td style="border: none; padding: 0 10px;">Month</td> <td style="border: none; padding: 0 10px;">Day</td> <td style="border: none; padding: 0 10px;">Year</td> </tr> <tr> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px;"></td> <td style="border: 1px solid black; width: 40px; height: 20px; text-align: center;">2002</td> </tr> </table>	Month	Day	Year			2002	Point Identification Code <table style="display: inline-table; border: none;"> <tr> <td style="border: none; padding: 0 10px;">GPS Unit</td> <td style="border: none; padding: 0 10px;">Village</td> <td style="border: none; padding: 0 10px;">Feature</td> <td style="border: none; padding: 0 10px;">Waypoint</td> </tr> <tr> <td style="border: 1px solid black; width: 60px; height: 20px;"></td> <td style="border: 1px solid black; width: 60px; height: 20px;"></td> <td style="border: 1px solid black; width: 60px; height: 20px;"></td> <td style="border: 1px solid black; width: 60px; height: 20px;"></td> </tr> </table>	GPS Unit	Village	Feature	Waypoint					Coordinates <table style="display: inline-table; border: none;"> <tr> <td style="border: none; padding: 0 10px;">North</td> <td style="border: none; padding: 0 10px;">West</td> </tr> <tr> <td style="border: 1px solid black; width: 120px; height: 20px;"></td> <td style="border: 1px solid black; width: 120px; height: 20px;"></td> </tr> </table>	North	West		
Month	Day	Year																		
		2002																		
GPS Unit	Village	Feature	Waypoint																	
North	West																			
Group <input style="width: 100%;" type="text"/>	Area Identification Name <input style="width: 100%;" type="text"/>																			
Feature Codes: Farming=F; Hunting=H; Fishing=P; Gathering=G	Use Zone Savannah <input type="checkbox"/> Bush Mouth <input type="checkbox"/> Bush <input type="checkbox"/> Mountain Foot <input type="checkbox"/> Up the Mountain <input type="checkbox"/>																			

HUNTING

Type of Site	Site Use Status	Species Hunted	Methods Used	Frequency of Use
Feeding Area <input type="checkbox"/>	Active <input type="checkbox"/>	Bush Cow <input type="checkbox"/>	Bow & Arrow <input type="checkbox"/>	Daily <input type="checkbox"/>
Track <input type="checkbox"/>	Inactive <input type="checkbox"/>	Deer <input type="checkbox"/>	Hunting Dogs <input type="checkbox"/>	2-4 times/week <input type="checkbox"/>
Drinking Pond <input type="checkbox"/>		Bush Hog <input type="checkbox"/>	Guns <input type="checkbox"/>	Monthly <input type="checkbox"/>
Nesting Area <input type="checkbox"/>		Powis <input type="checkbox"/>	Traps <input type="checkbox"/>	4-6 times/year <input type="checkbox"/>
Other <input style="width: 100%;" type="text"/>		Others <input style="width: 100%;" type="text"/>	Others <input style="width: 100%;" type="text"/>	1-2 times/year <input type="checkbox"/>
				Other <input style="width: 100%;" type="text"/>
Amount of Catch	Use of Catch	Threats to Site	Condition of Resource	
Less than 3 <input type="checkbox"/>	Domestic Consumption <input type="checkbox"/>	Over-hunting <input type="checkbox"/>	Excellent <input type="checkbox"/>	Good <input type="checkbox"/>
4-10 <input type="checkbox"/>	Sale Outside of Village <input type="checkbox"/>	Mining <input type="checkbox"/>	Poor <input type="checkbox"/>	Very Poor <input type="checkbox"/>
10-20 <input type="checkbox"/>	Both <input type="checkbox"/>	Poaching <input type="checkbox"/>	Notes	
20-50 <input type="checkbox"/>	% Amount sold <input style="width: 100%;" type="text"/>	Logging <input type="checkbox"/>		
More than 50 <input type="checkbox"/>	outside village	Other <input style="width: 100%;" type="text"/>		

FISHING

Type of Site	Site Use Status	Species Fished	Methods Used	Frequency of Use
River <input type="checkbox"/>	Active <input type="checkbox"/>	Huri <input type="checkbox"/>	Hook and line <input type="checkbox"/>	Daily <input type="checkbox"/>
Creek <input type="checkbox"/>	Inactive <input type="checkbox"/>	Yarou <input type="checkbox"/>	Poisoning <input type="checkbox"/>	2-4 times/week <input type="checkbox"/>
Pond <input type="checkbox"/>		Lukunani <input type="checkbox"/>	Seine/ Cast Net <input type="checkbox"/>	Monthly <input type="checkbox"/>
Other <input style="width: 100%;" type="text"/>		Patwa <input type="checkbox"/>	Bow and Arrows <input type="checkbox"/>	4-6 times/year <input type="checkbox"/>
		Others <input style="width: 100%;" type="text"/>	Others <input style="width: 100%;" type="text"/>	1-2 times/year <input type="checkbox"/>
				Other <input style="width: 100%;" type="text"/>
Amount of Catch	Use of Catch	Threats to Site	Condition of Resource	
Less than 3 <input type="checkbox"/>	Domestic Consumption <input type="checkbox"/>	Over-fishing <input type="checkbox"/>	Excellent <input type="checkbox"/>	Good <input type="checkbox"/>
3-10 <input type="checkbox"/>	Sale Outside of Village <input type="checkbox"/>	Mining <input type="checkbox"/>	Poor <input type="checkbox"/>	Very Poor <input type="checkbox"/>
10-20 <input type="checkbox"/>	Both <input type="checkbox"/>	Poaching <input type="checkbox"/>	Notes	
20-50 <input type="checkbox"/>	% Amount sold <input style="width: 100%;" type="text"/>	Poisons <input type="checkbox"/>		
More than 50 <input type="checkbox"/>	outside village	Other <input style="width: 100%;" type="text"/>		

Month <input type="text"/> Day <input type="text"/> Year <input type="text" value="2002"/> Date	Point Identification			Coordinates	
Group <input type="text"/>	GPS Unit <input type="text"/>	Village <input type="text"/>	Feature <input type="text"/>	Waypoint <input type="text"/>	North <input type="text"/>
Area Identification					
<i>Feature Codes: Farming=F; Hunting=H; Fishing=P; Gathering=G</i>					
Name <input type="text"/>			Use Zone Savannah <input type="checkbox"/> Bush Mouth <input type="checkbox"/> Bush <input type="checkbox"/> Mountain Foot <input type="checkbox"/> Up the Mountain <input type="checkbox"/>		

GATHERING

Site Use Status	Species Collected	Methods Used	Frequency of Use	Amount Collected
Active <input type="checkbox"/>	Palm Leaves <input type="checkbox"/>	Cut and Carry <input type="checkbox"/>	Daily <input type="checkbox"/>	<input type="text"/>
Inactive <input type="checkbox"/>	Wild Fruits <input type="checkbox"/>	Tapping <input type="checkbox"/>	2-4 times/week <input type="checkbox"/>	
	Muckru <input type="checkbox"/>	Picking <input type="checkbox"/>	Monthly <input type="checkbox"/>	
	Medicine <input type="checkbox"/>	Pork-knocking <input type="checkbox"/>	4-6 times/year <input type="checkbox"/>	
	Others <input type="text"/>	Others <input type="text"/>	1-2 times/year <input type="checkbox"/>	
			Other <input type="text"/>	

Use of Collection	Threats to Site	Condition of Resource	
Domestic Consumption <input type="checkbox"/>	Over-Harvesting <input type="checkbox"/>	Excellent <input type="checkbox"/>	Good <input type="checkbox"/>
Sale Outside of Village <input type="checkbox"/>	Mining <input type="checkbox"/>	Poor <input type="checkbox"/>	Very Poor <input type="checkbox"/>
Both <input type="checkbox"/>	Poaching <input type="checkbox"/>	Notes	
%Amount sold outside village <input type="text"/>	Logging <input type="checkbox"/>		
	Other <input type="text"/>		

FARMING

Farmer's Name <input type="text"/>		Active <input type="checkbox"/>	Fallow <input type="checkbox"/>	Abandoned <input type="checkbox"/>	Age of Farm <input type="text"/>	Persons Fed <input type="text"/>
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Method of Extension	Size of Farm	Soil Type	Main Crops Planted
Shifting <input type="checkbox"/> Extension <input type="checkbox"/>	< 1 acre <input type="checkbox"/> 1 acre <input type="checkbox"/>	Gravelly <input type="checkbox"/> Sandy <input type="checkbox"/>	Cassava <input type="checkbox"/> Banana <input type="checkbox"/>
Rotation <input type="checkbox"/>	2-5 acre <input type="checkbox"/> > 5 acre <input type="checkbox"/>	Clayey <input type="checkbox"/> Peggasse <input type="checkbox"/>	Peanuts <input type="checkbox"/> Mixed <input type="checkbox"/>
Other <input type="text"/>		Loamy <input type="checkbox"/>	Other <input type="text"/>

Yield per Acre	Threats to Site	Pest and Diseases	Notes
<input type="text"/>	Over-farming <input type="checkbox"/>	Deer <input type="checkbox"/>	Notes
	Mining <input type="checkbox"/>	Caterpillar <input type="checkbox"/>	
	Wildlife <input type="checkbox"/>	Acoushi Ants <input type="checkbox"/>	
	Logging <input type="checkbox"/>	Hogs <input type="checkbox"/>	
	Other <input type="text"/>	Other <input type="text"/>	

Use of Produce	Other
Domestic Consumption <input type="checkbox"/>	
Sale Outside of Village <input type="checkbox"/>	
Both <input type="checkbox"/>	
% Amount sold outside village <input type="text"/>	

Copy of Data Results Summaries

Farming Summary

Village^{KT}

Total Number of Points6

Use None

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain			
0	0	6	0	0			

Use Status

Active	Fallow	Abandoned	No Response				
6	0	0	0				

Method of Extension

Shifting	Extension	Rotation	Other	No response			
0	5	1	0	0			

Size of Farm

< 1 Acre	1 Acre	2-5 Acre	> 5 Acre	No Response			
0	0	4	1	1			

Soil Type

Gravelly	Sandy	Clayey	Peggasse	Loamy	No Response		
0	0	1	0	5	0		

Main Crops Planted

Cassava	Banana	Peanuts	Mixed	Other	No Response		
0	1	0	5	0	0		

Use of Produce

Dom. Consmpt.	Sale	Both	No Response				
5	0	1	0				

Threats to Site

Over-Farming	Mining	Wildlife	Logging				
0	0	0	0				

Pest and Diseases

Deer	Caterpillar	Acoushi Ants	Crickets	Hogs	Monkeys	Birds	Agouti
0	0	5	0	4	0	0	0

Hunting Summary

VillageKT

Total Number of Points 14

Use None

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain			
0	0	12	1	1			

Type of Site

Feeding Area	Track	Drinking Pond	Nesting Area	Combined	No Response		
4	0	0	0	8	2		

Use Status

Active	Inactive	No Response					
12	0	2					

Species Hunted

Bush Cow	Deer	Bush Hog	Powis	Armadillo	Turtles	Labba	Acouri
13	12	12	12	0	0	0	0

Methods Used

Bow and Arrows	Hunting Dogs	Guns	Traps				
12	12	0	1				

Frequency of Use

Daily	2-4X/week	monthly	4-6 X /year	1-2 X /year	No Response		
0	0	4	6	2	2		

Amount of Catch

< 3	3 to 10	10 to 20	20 to 50	> 50			
7	1	0	2	1	3		

Use of Catch

Dom. Consumpt	Sale	Both	No Response				
10	0	0	4				

Threats to Site

Over-Hunting	Mining	Poaching	Logging				
0	0	0	0				

Condition of Resource

Excellent	Good	Poor	Very Poor	No Response			
11	0	0	0	3			

Fishing Summary

VillageKT

Total Number of Points13

Use None

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain					
0	0	13	0	0					

Type of Site

River	Creek	Pond	Other	No Response					
0	10	2	0	1					

Use Status

Active	Inactive								
13	0								

Species Fished

Arapima	Tiger Fish	Lukunani	Baira	Hour	Yarrow	Patwa	Piaba	Haimara	Kassi
0	0	11	0	11	12	11	0	3	0

Methods Used

Hook and Line	Poisoning	Cast Net/Seine	Bow and Arrows						
13	0	1	13						

Frequency of Use

Daily	2-4X/week	Month	4-6 X /year	1-2 X /year	No Response				
0	0	9	3	0	1				

Amount of Catch

< 3	3 to 10	10 to 20	20 to 50	> 50					
0	0	0	3	10					

Use of Catch

Dom. Consumpt	Sale	Both							
13	0	0							

Threats to Site

Over-Fishing	Mining	Poaching	Poisons						
0	0	0	0						

Condition of Resource

Excellent	Good	Poor	Very Poor						
13	0	0	0						

Gathering Summary

VillageKT

Total Number of Points 10

Use None

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain			
0	0	5	0	5			

Use Status

Active	Inactive					
10	0					

Species Collected

Palm Leaves	House Poles	Muckru	Nibbi	Wild Fruits		
0	0	3	4	4		

Methods Used

Cut and Carry	Tapping	Picking	Pork knocking			
6	5	3	0			

Frequency of Use

Daily	2-4 times /week	Monthly	4-6 Times /year	1-2 Times /year	No Response	
0	0	0	8	1	1	

Use of Collection

Dom. Consumpt	Sale	Both	No Response			
9	0	0	1			

Threats to Site

Over-Harvesting	Mining	Poaching	Logging				
0	0	0	0				

Condition of Resource

Excellent	Good	Poor	Very Poor				
10	0	0	0				

Age:
of dependants:
Gender:

Conservation International Guyana

COMMUNITY RESOURCE EVALUATION VILLAGE SURVEY

FARMING

- (1) How many farms do you have?
- (2) Where are your farm(s) located (savannah, bush mouth, up the mountain etc.)?
- (3) How big is your farm(s)?
- (4) How do you get to your farm (bicycle, walking, boat etc.)?
- (5) How far away is your farm (hours/minutes)?
- (6) How often do you go to your farm?
- (7) How much of your produce do you sell and where?
- (8) What are the threats that affect your farm?
- (9) What do you think is the biggest threat to your farm?
- 10) How do you solve these problems?
- (11) What has changed?

HUNTING AND FISHING

- (1) Where do you go to hunt / fish?
- (2) How often do you go there to fish/hunt?
- (3) What are the methods that you use (e.g. hook and line, seine etc.)?
- (4) Do you sell any of the fish or game that you catch (in the village, Lethem etc.) and how much of it do you sell?
- (5) What are the threats that affect your hunting/fishing resources?

- (4) Do you have to go further to fish or hunt than you did in the past?
- (5) How much further do you have to go (time)?

(6) Is the fish or game as available as it used to be in the past?

(7) Is there any animal/fish that is not there anymore?

(8) What has changed?

GATHERING

(1) Where do you go to gather materials?

(2) How often do you go to gather materials?

(3) Do you sell any of the materials that you gather (in the village, Lethem etc.) and how much do you sell?

(4) What are the threats to the resources that you gather?

(5) Are the resources that you gather, as available as in the past?

(6) Do you have to go further than you did before?

(7) How much further do you have to go (time/miles)?

(8) Is there any material that you used to gather that is not there anymore?

(9) What has changed?

Copy of Village Survey Results Summary

Farming Village Summary

Village Katoka

Total Number of Points 76

Age

No Response	15-28	29-40	41-55	Above 55			
0	15	29	23	9			

Gender

Male	Female	No Response					
52	21	3					

Number of Dependants

Average	Variance	Maximum	Minimum				
5.74	5.45	12	1				

Number of Farms

Average	Variance	Maximum	Minimum				
2.51	0.95	5	1				

Size of Farm

< 1 Acre	1>2 Acre	2-4 Acre	5 Acre and more	Other	No Response		
0	3	21	5	47	0		

Farming Zone

Savannah	Bush	Bush Mouth	Deep Bush	Mountain Foot	Up the Mountains	Other	No Response
2	8	39	15	3	7	2	0

Methods of Transportation

Walking	Bicycle	Bullock Cart	Boat	Other	No Response		
47	17	2	25	0	0		

Frequency of Use

Daily	2 x wk	3 x wk	4 x wk	Weekly	Monthly	Seasonally	Other
24	8	11	1	29	1	1	1

Use of Produce

Dom. Consmt.	Sale	Both	No Response				
21	0	52	3				

Threats to Farms

Wild animals	acoushi ants	weather	caterpillar	domestic animals	monkey	weed	other
58	34	4	5	3	3	2	6

Biggest Threat

Wild animals	acoushi ants	weather	caterpillar	domestic animals	monkey	weed	fire
32	35	4	1	1	0	0	0

Hunting Summary

Village Katoka

Total Number of Points 35

Age

No Response	15-28	29-40	41-55	Above 55			
0	8	12	13	2			

Gender

Male	Female	No Response					
33	2						

Number of Dependants

Average	Variance	Maximum	Minimum				
5.23	5.68	12	1				

Frequency of Use

Daily	3 x wk	Weekly	Monthly	Seasonally	Quarterly	2 x Yr	Other
1	1	7	10	5	2	0	9

Methods Used

Arrow & Bows	Guns	Dogs	Other	No Response			
25	0	3	0	0			

Hunting Zone

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain	Deep Bush	Other	No Response
0	4	3	2	1	23	1	1

Hunting Site

Feeding area	Track	Pond	Creek	Nesting area	Combined	No Response	
0	0	1	1	0	32	1	

Use of Catch

Dom. Consumpt	Sale	Both	No Response				
18	2	15	0				

Threats to Site

Over-Hunting	Mining	Weather	New_Methods	Fire	Population	Outsiders	Other
7	0	10	0	0	8	6	2

Do you Fish Further?

Yes	No	No Response					
26	0	9					

Change In Resource availability

Yes	No	No Response					
6	0	29					

Extinct or Scarce Species

deer	amadillo	labba	Mata Mata	bush hog			
2			2				

Fishing Summary

Village Katoka

Total Number of Points 70

Age

No Response	15-28	29-40	41-55	Above 55			
0	14	29	20	7			

Gender

Male	Female	No Response					
52	15	3					

Number of Dependants

Average	Variance	Maximum	Minimum				
5.79	5.45	12	1				

Frequency of Use

Daily	2 x wk	3 x wk	4 x wk	5 x wk	Weekly	2 x mth	Other
35	1	0	0	0	20	3	8

Fishing Zone

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain	Deep Bush	Other	No Response
7	4	7	5		17	3	27

Fishing Site

River	Creek	Pond	Falls	Combined	No Response		
6	22	2	1	38	1		

Use of Catch

Dom. Consumpt	Sale	Both	No Response				
30	3	37					

Methods Used

Hook and Line	Poisoning	Cast Nets	Bow and Arrows	Seine	Other	No Response	
66	1	3	34	27	10	2	

Threats to Site

Over fishing	Weather	Poison	Population	New_Methods	Outsiders	Other	No Response
8	0	14	10	9	11	7	14

Do you Fish Further?

Yes	No	No Response					
46	0	24					

Change In Resource availability

Yes	No	No Response					
39	0	31					

Extinct or Scarce Species

Arapaima	Big Fishes	Lukunani	Biara	Hiamara	Manji/Mangi	Arawana	Turtles
36	1	0	0	1	0	3	11

Gathering Summary

Village Katoka

Total Number of Points 64

Age

No Response	15-28	29-40	41-55	Above 55			
0	13	25	20	6			

Gender

Male	Female	No Response					
51	10	3					

Number of Dependants

Average	Variance	Maximum	Minimum				
5.8	5.81	12	1				

Frequency of Use

Monthly	Quarterly	Seasonally	Yearly	Every 2 yrs	Every 5 yrs	Other	No Response
1	0	1	11	5	7	30	9

Gathering Zone

Savannah	Bush Mouth	Bush	Mountain Foot	Up The Mountain	Deep Bush	Other	No Response
0	18	15	4	5	16	3	3

Use of Catch

Dom. Consumpt	Sale	Both	No Response				
47	1	11	5				

Threats to Site

Over-Harvesting	Weather	Population	Fire	Clearing land/farms	Outsiders	Wastage	No Response
24	1	7	12	2	1	2	18

Do you Gather Further?

Yes	No	No Response					
12	0	52					

Change In Resource availability

Yes	No	No Response					
31	30	3					

Extinct or Scarce Species

House Materials	Soft wood						
	1						

