

Linking Market Intelligence and Remote Villagers: Innovative Use of Rural Radio Networks in Brazilian Amazonia.



Project Summary

This project aimed to create a dissemination methodology that enhances the potential of management/market information related to non-timber forest products (NTFPs) in improving the livelihoods of small holders in Brazilian Amazonia. This methodology was developed, implemented and evaluated based on a set of objectives: (i) identify and document the knowledge base of selected Amazonian small holders, as well as what type of scientific/market information can be potentially supportive to community-based forest economies; (ii) optimize the way to broadcast the selected information through local radio networks for an improved income generation of local communities; and (iii) assess the impact of the communication intervention on the behaviour, knowledge base and negotiation skills of small holders. Having a range of market related information (e.g. research findings, innovative publications, market data) as a point of departure, the expected outputs of the project are (i) improved theoretical understanding of the limits and opportunities of radio as a communication development tool; (ii) development of a dissemination methodology which assess the potential of radio as a tool for rural development with forest products; (iii) improved network of radio communication in the study area with relevant content for forest dependent communities (market prices, ecology, value addition); and (iv) improved knowledge base and negotiation skills among small holders for selected forest products in study communities. Based on the new methodology, a template was developed for the production of radio programmes that are supportive of forest-based economies. The project is based on the premise that access to information has the potential to increase small holders' negotiation power and market presence, as well as awareness of the value of managing forest resources sustainably.

Research Objectives and Hypotheses

Research Question:

How can improved access to relevant market intelligence through radio affect the knowledge base, negotiation skills and/or affect the behaviour of small holders engaged in the production and trade of NTFPs?

Hypothesis: Better informed commercialization of NTFPs enhances the livelihoods of isolated small holders as well as the conservation of forest biodiversity in Brazilian Amazonia.

Objective 1 / Sub-question 1: What type of scientific/market information is relevant to community-based forest economies?

Hypothesis 1: Information that is culturally affirming, socially inclusive, geopolitically relevant, and which reflects a diversity of voices is more likely to shift management decisions.

Objective 2 / Sub-question 2: In what contexts, form and manner should the selected information be disseminated in the research context?

Hypothesis 2: Valuation and inclusion of traditional knowledge in research and educational process and products result in higher uptake by local people.

Objective 3 / Sub-question 3: To what extent can communication interventions affect small holders' perception regarding NTFP commercialization strategies?

Hypothesis 3A: With access to relevant market and management information, forest people will make improved decisions regarding use and trade of timber and non-timber forest products.

Hypothesis 3B: There are many places where information will make little or no difference, as macroeconomic forces, social disorganisation, corruption and inequitable power relations do not allow informed decision making processes by local stakeholders.

Hypothesis 3C: Lack of adequate information at the grassroots level represents a major constraint to more optimised management and marketing of forest resources.

The objectives of this project are (i) the identification of types of scientific/market/traditional knowledge information that are relevant to community-based forest economies; (ii) the optimization of the way to broadcast the selected information through local radio networks for an improved income generation of local communities; and (iii) the assessment of the impact of the communication intervention on the behaviour, knowledge base and negotiation skills of small holders. The generation of systematic data on small holders' socio-economic condition, knowledge base and perceptions on production and trade of NTFPs, collected before and after the communication intervention (radio workshop and subsequent broadcasts of NTFP-related radio programmes), enabled an evaluation process that will answer the proposed research question, and test its respective hypothesis.

The expected results of the project were to identify whether and under what conditions existing data can generate concrete livelihood improvements when transmitted through local radio networks. In particular, the following outputs are expected:

- 1) Improved theoretical understanding of the limits and opportunities of radio as a communication development tool.
- 2) Development of a dissemination methodology that assess the potential of radio as a tool for rural development with forest products.
- 3) Improved network of radio communication in the study area with relevant content for forest dependent communities (market prices, ecology, value addition).
- 4) Improved knowledge base and negotiation skills among small holders for selected forest products in study communities.

Objectives, Methods, Activities

<p>Research Question: How can improved access to relevant market intelligence through radio affect the knowledge base, negotiation skills and/or affect the behaviour of small holders engaged in the production and trade of NTFPs?</p> <p>Hypothesis: Better informed commercialization of NTFPs enhances the livelihoods of isolated small holders as well as the conservation of forest biodiversity in Brazilian Amazonia.</p>			
	<p>Sub-question / Objective 1 What type of scientific/market information is relevant to community-based forest economies?</p>	<p>Sub-question / Objective 2 In what contexts, form and manner should the selected information be disseminated in the research context?</p>	<p>Sub-question / Objective 3 To what extent can communication interventions affect small holders' perception regarding NTFP commercialization strategies?</p>
Data to be collected	Sources of market/scientific data/traditional knowledge with potential to be used as raw material for the pilot radio broadcasts; perceptions and socio-economic data of project's main stakeholders (baseline study)	Detailed information about selected radio networks to be adopted as case studies (reach, target audience, programme contents, schedule, audience feedback etc), views of informants / target population to assist production of radio broadcasts	Comparative perceptions of small holders regarding NTFP commercialization before and after exposure to new information
Data collection methods	Documentary sources (project documents, radio messages), interviews, observation	Documentary sources, participant observation, semi-structured interviews, structured observation	Semi-structured interviews (follow-up of baseline study), participatory action research, focus groups
Data collection activities	<p>Planning</p> <ul style="list-style-type: none"> - Identify and select potential research and NGO partners that have recently generated market data and information on key NTFPs - Update literature review on NTFPs, the geopolitics of the research context and communication for development for project-relevant findings - Develop topic guides for baseline study <p>Collecting</p> <ul style="list-style-type: none"> - Gather project documentation to be used as raw material for radio broadcasts - Carry out baseline study in Gurupá <p>Analysing</p> <ul style="list-style-type: none"> - Select, process and systematize the most relevant research findings to be translated into radio programmes / code interview data - Determine/evaluate relevance of information used based on project's final results 	<p>Planning</p> <ul style="list-style-type: none"> - Identify and liaise with appropriate radio networks - Determine timetable of first set of field visits (meetings with radio workers and baseline study) <p>Collecting</p> <ul style="list-style-type: none"> - Field observations, semi-structured interviews with radio workers and target audience - On site structured observation (collect messages and letters sent to radio studios before and after broadcasting of pilot radio programmes) <p>Analysing</p> <ul style="list-style-type: none"> - Content analysis of NTFP-related messages and letters sent to the radio studios - Coding of interview data to determine the most efficient format of radio broadcasts in terms of community-based uptake 	<p>Planning</p> <ul style="list-style-type: none"> - Discuss contents, design and logistics of radio workshop with radio specialists (e.g. Mara Régia di Perna) - Schedule radio workshop - Design assessment tool to compare perceptions of a variety of stakeholders (men, women, leaders, collectors, processors, marketers) before and after the broadcasting of the pilot radio programmes <p>Collecting</p> <ul style="list-style-type: none"> - Carry out semi-structured interviews / survey with target small holders before broadcasts (baseline study) - Carry out radio workshops in the selected field sites - Broadcast pilot radio programmes (during approx. 4 months) - Carry out second set of interviews (follow-up of baseline study) after broadcasts <p>Analysing</p> <ul style="list-style-type: none"> - Analyse and compare interview data (pre and post)¹ - Develop output products - Proceed to project evaluation (below)
Project evaluation	<ul style="list-style-type: none"> - Replicability: develop scaling up strategy based on results, disseminate output products (e.g. basic manual for community radios); - Reliability: explain research procedures in research reports and related scientific articles and output products; - Validity: develop triangulation methods to legitimate results, get feedback directly from local communities and through peer review at conferences/meetings. 		

¹ Analysis will take into account differential uptake of information by gender, age, degree of contact with forest goods, distance from market and availability of NTFPs. In project areas with conflicting use of timber and non-timber species, one key indicator of influence will be if and how small holders begin to analyze the costs and benefits of trading their forest species.

Methodological Considerations

The process of answering the research questions included a baseline study, followed by a radio workshop aimed at developing and broadcasting pilot radio programmes based on various sources of market intelligence, species use and processing, and management information through a community radio - *Rádio Educadora 87,9 FM* - in Gurupá, State of Pará, Brazilian Amazonia. Then, a second assessment was planned to enable a comparison of the perceptions of the target population before and after the communication intervention. Together, these 3 components would result in a pilot study, which would then subsidize the design of a dissemination strategy to be negotiated with further partners. However, due to lack of funding, the second assessment could not be carried out, thus the final analysis and conclusions were based on the data collected during the baseline study and the radio workshop, as well as phone conversations with community radio members involved in the project.

The research site (case study) was Gurupá, where the applicant carried out her PhD field research on radio communication and forest livelihoods. The selection process was based on a set of criteria including existence of radio programmes that already target small holders engaged in production and commercialization of NTFPs, willingness to collaborate with research team, diversity of communities in terms of access to information and markets, political mobilization and socio-economic conditions, collaboration with EU-funded consortia that was active in Gurupá, logistical feasibility.

This project used information from four major sources as a point of departure. First, EMBRAPA (Brazilian Agricultural Research Corporation) has been producing 15-minute radio programmes on agricultural and forestry practices (*Prosa Rural*) since 2005 but has not reached its dissemination potential yet. Second, a number of current projects with various NGOs (Imazon, Fase, CIFOR) are generating valuable market data but have limited ability to disseminate it to the stakeholders who need it most (i.e. newly created extractive reserves in Gurupá and Porto de Moz). Third, 90 Brazilian scientists and scores of forest people, have recently collaborated with CIFOR to synthesize research and traditional knowledge relating to 30 amply distributed tree and palm species. Written in simple language the manual includes information regarding the comparative value of timber and non-timber, cultural values related to forest goods, recipes, songs, stories and farmer derived management techniques. Finally, local practices will be identified, documented and included in the radio broadcasts, enabling exchange of experiences among small holders from different areas. Recent efforts to generate and synthesize science relevant to small holders are timely but require attention to communication strategies to maximise their effectiveness. Often the scientists and organizations generating this information are poorly equipped and/or trained in communication. Thus, this proposal seeks to meet the increasing demand for information from grassroots groups and forest communities throughout the Brazilian Amazon making use of a range of useful yet underutilized research/market/traditional knowledge data.

The project was originally planned according the six stages listed below:

- 1) Planning
- 2) Baseline study
- 3) Radio workshop
- 4) Broadcasting period
- 5) Mid-term evaluation
- 6) Final reporting and implementation of dissemination strategy

However, due to the funding problems mentioned above, the mid-term evaluation was not accomplished, thus the project consisted of five stages, each of which including a set of activities and methods, as reported below.

1) Planning

The planning stage consisted of contacting and selecting potential research and NGO partners that have recently generated market data and relevant information on key non-timber forest products (Imazon, CIFOR, EMBRAPA etc). Also, during this stage the appropriate local radio networks for collaboration were selected, and the partnership with representatives of the research site formalized. Additional planning activities included (i) the development of topic guides for the data collection stage (baseline study), including a set of criteria to determine under what conditions the communication strategy chosen enhances the commercialization of NTFPs locally; (ii) the definition of a timetable of first set of field visits; and (iii) the design of an assessment tool (e.g. sampling strategy for semi-structured interviews) to compare knowledge base/behaviour of a variety of stakeholders (village men, women, leaders, collectors, processors, marketers) before and after the broadcasting of the radio programmes.

PRELIMINARY FIELD TRIP TO BELÉM | JAN 2008

With the presence of the project supervisor, Dr. Patricia Shanley (Livelihoods Programme, CIFOR), in Belém during January 2008 (at the time she was based in Bogor, Indonesia, where CIFOR has its headquarters) it proved important to organize my first field trip during this period so we could deepen our discussions about the project, while arranging meetings with as many potential partners as possible. With this goal in mind we agreed on a period (14-18 January) and carried out successful meetings with the following people/organizations, aiming at presenting the project and formalizing potential partnerships:

- ✱ *CIFOR local team*: as CIFOR's Belém office was the project's institutional base, the idea was to discuss the project with the local team, gather new ideas, comments, contacts and suggestions to enrich the project strategy.
- ✱ *IMAZON* (The Amazon Institute of People and the Environment, www.imazon.org.br): given the important partnership agreed with the EU-funded consortia, a meeting with Paulo Amaral (senior researcher and coordinator of the consortia) was crucial to discuss the terms of the partnership in more detail. Also, I met other IMAZON collaborators involved in the consortia such as Francy (responsible for collection and systematization of prices of forest products to be broadcasted by Gurupá's community radio) and Adriana (who joined a communication workshop carried out last year in Porto de Moz as part of the consortia's activities).
- ✱ *FASE Gurupá* (Federation of Social and Educational Assistance Organisations, www.fase.org.br): the Amazonian municipality of Gurupá has been selected as the field site of the pilot stage of the project. As such, it was essential to approach FASE Gurupá, a NGO with strong presence in the region, which was also a key player in the above-mentioned consortia. Two important people to meet were Carlos Ramos and Manoel Pantoja (Bira), which whom I already have a good relationship since my PhD fieldwork.
- ✱ *EMBRAPA Eastern Amazonia* (Brazilian Agricultural Research Corporation, www.embrapa.br): EMBRAPA's mission is to provide feasible solutions for the sustainable development of Brazilian agribusiness through knowledge and technology generation and transfer. EMBRAPA, which is linked to the Brazilian Ministry of Agriculture, is organized as a large network, composed of 41 decentralized Centres distributed among the several regions of Brazil. EMBRAPA Eastern Amazonia is one of the world's most important research centres for agro-ecology of the tropical humid region, contributing studies in the sustainable

development of forestry, agriculture and livestock breeding activities in Eastern Amazon. Its 136 researchers generate technologies and knowledge for the rational use and conservation of natural resources, the adequate use of the native forests and the improvement of the systems of production and land use in family agriculture. The fact that CIFOR used to be hosted by EMBRAPA Eastern Amazonia in Belém as part of an international cooperation initiative represented an important opportunity to join forces and explore EMBRAPA's research projects as potential sources of information to be part of the radio programmes produced by the project. Among their many researchers I met Dr. Alfredo Homma (Rural Economy specialist), Dr. Jorge Yared (General Director), and EMBRAPA's Communication Department as a first step. They all showed enthusiasm for the project and willingness to collaborate.

- ✱ *Iniciativa Amazônica* (Amazon Initiative, www.iamazonica.org.br): translated as 'International Consortium for the Conservation and Sustainable Use of Natural Resources in the Amazon', the initiative was also hosted by EMBRAPA Eastern Amazonia (next to CIFOR offices) and was seen as a potential partner in the provision of research results to be disseminated through the radio programmes. The initiative includes not only the Brazilian portion of the Amazon but the biome as a whole, which also includes Bolivia, Colombia, Peru, Ecuador and Venezuela. The consortia is formed by a large number of forestry research centres based in the member countries, engaged in collaborative projects aimed at identifying and implementing innovative sustainable solutions for the use of the forest. Dr. Roberto Porro (Executive Director) is the main contact.
- ✱ *Rádio Cultura*: this governmental educational radio station can be an important partner at the dissemination stage of the project.
- ✱ *Rádio Margarida* (www.radiomargarida.org.br): Rádio Margarida is a Belém-based NGO whose mission is to disseminate art, culture and popular education as a means to improve the livelihoods of Amazonian peoples. In partnership with the Federal University of Pará State (UFPA) since 1994, they organize urban and rural awareness interventions based on a number of popular education/communication languages such as radio, theatre, puppetry, video, printed media and so forth. A meeting with the general coordinator of the organization (Osmar Pancera) was an important step towards identifying a potential collaboration in the design and implementation of the radio workshops and broadcasts, as well as the production of the output products planned for the dissemination stage of the project.

2) Baseline Study in Gurupá

The successful identification of relevant NTFP-related data and their translation into radio broadcasts would depend on a well-conducted panel study (i.e. where information is collected from the same sample units two or more times). Thus, a carefully selected sample and efficient and comprehensive interview guides were crucial components of the project.

As a first data collection procedure, a baseline study was carried out with two main objectives: (i) audience analysis/formative evaluation (to help plan radio programmes); and (ii) baseline evaluation for radio programme (to compare against follow-up evaluation at end of project). In addition, the study served as a mid-term evaluation for current price broadcasts that were being transmitted as part of the EU-funded project that was also collaborating with this project (for which there was no baseline).

The intention of this evaluative exercise was to identify the knowledge base of small holders on prices and uses of NTFPs, level of awareness on the importance sustainable

forest management, negotiation and trading information, bargaining power towards buyers, types of information available, demand for NTFP-related information. For the current price broadcasts, we were interested in (1) how many people had heard the broadcasts with what frequency, (2) whether people who had heard the broadcasts had different beliefs about current market prices (and eventually, price trends), and (3) whether people have made decisions about whether/when to harvest NTFPs based on these prices, and (4) whether people have used these prices to negotiate with traders and/or decide where/when to sell NTFPs.

Having concluded the planning stage I then proceeded to the first data collection in the field, which consisted of a baseline study involving mainly semi-structured interviews with a selected sample of target small holders before the transmission of the broadcasts to be produced during the radio workshop, subsequent stage of the project. The interview guides (questionnaires) are available at the end of this document (see Appendix I). Additional methodological procedures during this stage included (i) participant observation in project sites (field observations and experiences in selected riverine communities); and (ii) structured observation (collection of messages and letters sent to radio studios).

The first fundamental issue to be addressed was sampling, of communities and of households/individuals. Given that the same households/individuals were expected to be interviewed during the post-evaluation of the radio broadcasts, random sampling techniques would be followed by purposive sampling.

In terms of the sample of communities for the baseline study, preferably this would include communities inside different broadcast zones (community radio and governmental radio), communities affiliated and not affiliated with FASE (the partner NGO), more and less accessible communities. Local maps could be a good basis for random sampling, but unfortunately we did not have access to these before the start of the study. Thus, the communities were selected on the basis of purposive/snowball sampling according to the evaluation criteria (explained below) and advice from local partners, before and during the pilot field trip.

To assess demand for and understand impact of radio programmes, it is useful to have a good characterization of the existing communication and transport infrastructure in each community. This information was included in the interview guide of key informants as a separate community questionnaire, and cross-checked with other strategic informants. The two key criteria chosen as the base for the selection of sample communities were:

- (a) the most important element of the radio program that I want to test (*level of access to market information*), and
- (b) the community characteristic that is most likely to affect the response to that element (*distance from urban centres*).

The criteria above may raise questions about the definition of distance and access to information. Based on consultations with local partners (FASE team) and community members, the concept of more or less distant was defined according to the travel time from the community to the nearest urban centre. According to these consultations we concluded that 5 hours or less of travel is not considered distant according to the local understanding, and more than 5 hours is already considered distant. As for the level of access to market information the criteria employed included the presence of communication tools (e.g. radio, two-way radio, telephone, cell phone) and transport facilities.

Then, under the supervision of Dr. Erin Sills, I developed a binary definition of the design element and the community characteristic, and created a contingency table reflecting the

4 possible combinations of the radio element and the community characteristic (below). The minimum of two communities and approximately 25 households recommended for each quadrant was met, totalling a sample of 11 communities and 114 households.

Total (communities): 11 Total (interviews): 114	<i>More distant from urban centre</i>	<i>Less distant from urban centre</i>
<i>More access to market info</i>	10- São João do Jaburu (17) 9- Ilha de Santa Bárbara (9) I Interviews: 26	4- Anjo da Guarda (6) 11- Ilha das Cinzas (15) 8- São Raimundo/Gurupá (11) II Interviews: 32
<i>Less access to market info</i>	1- Alto Pucuruí (5) 5- Marajoí: Santa Maria de Nazaré (14) 6- Marajoí: Divino Espírito Santo (9) 7- Marajoí: São Tomé (8) III Interviews: 36	2- Camutá do Pucuruí (6) 3- Jocojó (14) IV Interviews: 20

Note that the communities selection was a dynamic process that started remotely during the planning stage of the baseline study, and was only concluded in Gurupá during the pilot test of the research methods that took place *in loco* one week before the actual start of the baseline study. The pilot test consisted of visits to 4 potential communities (see itinerary below) where the main investigator (Mônica Barroso Keel) introduced the research assistant (Anne Caroline Gander) to the communities' leadership and tested the pre-designed questionnaires. Once the test reached its saturation point (approximately 4 community questionnaires and 5 household questionnaires) the necessary changes were made and new copies were printed and photocopied in Gurupá. In addition to the 4 communities included in the pilot test, 7 other communities were added to the sample according to the criteria explained above.

Pilot test of research methods / Introduction of research project <i>Gurupá, 9-16 March 2008</i>		
Date	Itinerary	Observations
9 Mar (Sun)	São Paulo-Macapá	Transfer to Santana port, and then to FASE's boat
10 Mar (Mon)	Ilha das Cinzas	Main products: shrimps and <i>açaí</i> ; Rádio Difusora present
11 Mar (Tue)	São João do Jaburu	Main products: andiroba oil, <i>açaí</i> , palmito; Rádio Difusora is present
12 Mar (Wed)	Alto Marajoí	Main products: <i>açaí</i> , palmito.
13 Mar (Thu)	Anjo da Guarda - Moju River (morning) and Casa Familiar Rural (afternoon)	Main products: <i>açaí</i> , fish; community radio is present
14 Mar (Fri)	Gurupá town	Meeting with team of the local community radio
15 Mar (Sat)	Return to Santana port (Macapá)	Regular boat
16 Mar (Sun)	Macapá-São Paulo	

Once the communities were selected a travel itinerary was built for the research assistant, who carried out the rest of the interviews. With the list of communities concluded I proceeded to the selection of the households to be interviewed in each community, using as main technique random drawing of approximately 20% of the total number of families in each community. Note that this technique was only adopted after realizing that purposive sampling was likely to produce a highly biased sample, for only the most influential and active families ended up being suggested by the community leaders. This perception led to the decision of picking the families from a hat as a strategy to give equal chances to all, and to include the most remote and less privileged families in the sample as well. Proceeding this way, we believe to have increased the representativeness of the sample, giving up the original idea of purposively selecting representatives of different socio-economic groups in each community (this would probably exclude the less connected families). This decision was also an answer to the reaction of 'pride' of the selected interviewees. Knowing the community dynamics where usually the same group of families gets involved in projects and surveys, a random selection turned the project more neutral and democratic inside the communities. Based on the pilot interviews, a set of basic guidelines was identified, including:

- If possible, involve at least one man and woman of each household in the interview;
- Ask permission to record the interview;
- Give a short introduction of the research project before the start of the interview;
- Do not make false promises related to the project results;
- Ask permission to take photos of the community and the interviewees.

In addition to the interviews and observations, a local assistant (Rôsula da Silva Costa) was hired to collect radio messages sent to the community radio studio during a similar period of the baseline study. A total of 444 messages were collected. This data was systematized and analysed against the interview data as a triangulation method.

The pilot test was an extremely important moment of the research project, as this allowed me to become familiar with the research assistant, introduce the project to part of the communities and its leadership, test and adjust the interview guides, finalize the sample selection, organize and plan the baseline study *in loco*, introduce and discuss the project with members of the local community radio, reconnect with the field, bring together action and reflection, and above all, reaffirm the relevance of the research project to the Amazonian context.

Having concluded the 114 interviews in the 11 communities of the sample, the research assistant systematized the interview data according to a systematization table that I developed (with the assistance of Simone Bauch) while Anne was still in the field. The completed systematization tables are available upon request. Based on these tables I carried out a preliminary analysis of the data collected, as follows. Parts of the interviews were taped, and are also available upon request. This audio material will be used to clarify eventual doubts and to illustrate the audio-visual project outputs planned.

THE COMMUNITIES

The community questionnaires were answered by one or more community members, according to the local circumstances. The main objective of this broader inquiry was to collect more general information about the characterization of each selected community, as well as the opinion of key leaders on relevant themes related to this research project. During the community meetings (or individual conversations in some cases) the project was introduced, and a full list of the families was raised for the household sample selection. The table below summarizes the main characteristics of each community raised during this stage of the baseline study:

Community	Informants (leaders)	Total of families	3 main sources of income	Community radio	Two-way radio	Boats
Quadrant I: more access to market info, more distant from urban centre						
São João do Jaburu	6	62	Palmito, salaries, açaí		✕	18
Ilha de Santa Bárbara	2	29	Açaí, fisheries, salaries		✕	10
Quadrant II: more access to market info, less distant from urban centre						
Anjo da Guarda	2	17	Açaí, palmito, salaries	✕	✕	8
Ilha das Cinzas	6	50	Açaí, fisheries, salaries		✕	17
São Raimundo/Gurupaí	33	48	Fisheries, açaí	✕		30
Quadrant III: less access to market info, more distant from urban centre						
Alto Pucuruí	9	17	Manioc flour, salaries	✕		3
Marajoí - Sta. Maria de Nazaré	3	45	Açaí, palmito, salaries		✕	7
Marajoí - Divino Espírito Santo	1	29	Açaí, palmito, salaries		✕	8
Marajoí - São Tomé	1	25	Açaí, palmito, salaries		✕	6
Quadrant IV: less access to market info, less distant from urban centre						
Camutá do Pucuruí	21	18	Salaries, manioc flour, pension	✕	✕	5
Jocojó	3	43	Pension, manioc flour, salaries	✕	✕	8

Of the eleven (11) communities involved in this baseline study, only two (2) are located outside protected areas, whereas nine (9) are located inside conservation units such as extractive reserve (3), sustainable development reserve (1), agro-extractivist settlement (2), former runaway slave communities (2), and land with formalized use permission by the Federal Government (1). This reflects the mosaic of conservation units present in the municipality, as a result of the strong action of the local social movement. It was also interesting to notice that all communities have a slightly growing population, with higher number of new families than of families who left the communities in the past 5 years.

Nine of the eleven communities are located in *várzea* areas, which refers to floodland subject to both tidal and annual invasion. *Várzea* is a floodplain of a white water river such as the Amazonas river, which receives an annual deposit of fertile silt. The remaining two - Camutá do Pucuruí and Jocojó - are *terra firme* communities, or non-flooded upland forest, or land not subject to annual inundation (elevation varies from immediately above flood level to several thousand feet).

Nine out of the eleven communities have local functioning schools (seven up to the 8th grade, one up to the 3rd grade and one up to the 4th grade). However, the two communities without schools (*Divino Espírito Santo* and *São Tomé*) live in close partnership with its neighbouring community *Santa Maria de Nazaré*, which means that their children attend this school. In terms of religion, seven communities are 100% catholic, three have both catholic and evangelic groups, and only one is 100% evangelic (*Alto Pucuruí*).

Access to health assistance in the sample communities is critical. Except *São João do Jaburu* and *Ilha das Cinzas*, all communities have only one local community health agent, and access to the nearest health centre range between 1 and 7 hours by boat.

The social organization of the selected communities have one characteristic in common: all have women's groups, and almost all (except *Ilha das Cinzas* and *Alto Pucuruí*) have youth groups. Only three have football clubs (*Alto Pucuruí*, *Camutá do Pucuruí* and *Jocojó*, all located in *terra firme* areas). Some also have children groups and collective work groups (*mutirão*). The *mutirão* is very present in 8 communities (5 have specific days set for collective work, and 3 set the days according to the demand). Only two out of the eleven communities have their own community association (*Camutá do Pucuruí* and *Ilha das Cinzas*). However, ten communities (the exception is *Camutá do Pucuruí*) are connected with inter-community associations. Also, 9 communities have a very high rate of members of Gurupá's Rural Workers Union (only *Divino Espírito Santo* and *São Tomé* do not have formal members).

On the production side, five communities have formally approved management plans. However, this does not mean that the other communities do not have internal rules for the use and management of natural resources, as all communities from the sample have internal plans of use (*plano de uso*) that are respected by the majority of the families. Different forest goods are extracted all year long according to their respective seasons.

The communication and transport infrastructure of the communities were raised in the second part of the questionnaire. An important communication vehicle in the municipality is a two-way radio network of which 9 communities of the sample are part. The equipment connects the communities with Gurupá town (where there are 2 two-way radios installed in strategic organizations: the community radio and the Rural Workers Union at the time of the data collection), with FASE's boat and office in Belém. However, at the time of the study the two-way radio was not working in three communities, indicating the vulnerability of the communities when it comes to technical assistance and equipment maintenance. Also, half of the communities have sporadic access to other types of two-way radio (private) installed in boats. Another important point of contact between the rural communities and the town is the local community radio, present in 5 out of the 11 communities at the time of the study (shortly after the baseline study a new equipment acquired by the community, thus increasing its reach to more communities). The *Rádio Difusora de Macapá* is also very important, reaching 10 out of the 11 communities. Given that it is a governmental radio its reach is much wider, representing an important potential partner for the project. The radio Director has been contacted and showed interest in collaborating with the project, which happened during the radio workshop. In addition, a couple of local commercial radios were mentioned by the respondents. The telephone is still a distant communication tool for the communities. Only 3 communities have access to public telephones (*Ilha de Santa Bárbara*, *São João do Jaburu* and *Jocojó*), and only one (*Ilha das Cinzas*) have cell phone signal through an antenna. The same cannot be said about television, heavily present (ranging between 6 and 16 units/community) in 10 out of the 11 communities. Note that there is no electricity in any of the communities and that all electrical/electronic appliances run on diesel generators.

Transport in the communities is also critical due to the long distances and the cost of fuel. Although all communities have small fishing/transport boats for the short/medium distances, to access regular boats they need to travel to the nearest urban centre (Gurupá or Macapá). Of the 11 communities inquired regular boats stop only at *Ilha de Santa Bárbara* (Macapá-Gurupá-Altamira itinerary). When asked about access to other boats, 8 communities mentioned the boat of the local government, middlemen and FASE.

The presence of middlemen is intense in the 8 communities located in floodable areas² (*várzea*). Their relationship with the middlemen range from indifference to friendship, but the importance of this actor in the region is unquestionable given the high level of isolation and 'des-information' on market prices by the communities. The role of the middlemen is of connection with markets, and in some cases the only source of market information. The frequency of visits by middlemen range between twice a month and permanent stay during the season. In communities with a more diversified production the presence of middlemen is more constant ('There is always something to sell'), whereas in those communities dedicated mainly to one product (e.g. fisheries in *Gurupá*) their presence is more concentrated during the season. There is still a third situation of the *açaí* producers who sell *palmito* all year long (its extraction does not depend on a season as it implies the cutting of the whole palm, which in the case of the communities of the sample are result of a sustainable management plan), and *açaí* only during the fruit season.

Apart from the middlemen, the communities receive periodical visits from two main organizations: the Catholic Church (except *Alto Pucuruí* which is evangelical) once or twice a year, and the local government (frequency varies from 1 to 12 times a year). Very few communities have been receiving visits from the NGOs FASE and IMAZON lately (*Gurupá*, *Ilha das Cinzas* and *São João do Jaburu*). Through those visits the communities have access to workshops on various themes related to their livelihoods such as alternative medicine, certification, forest management, community organization, production of candles and soaps, drugs and alcohol for local youth and so forth. It was interesting to notice that many of those workshops and discussions were organized internally by the local associations, once again demonstrating the high level of community empowerment and organization in the municipality.

When asked about whether the families are well-informed about the prices for which they sell their produce the answer of leaders of 8 communities was negative, while 3 asserted that they are well-informed. The justifications for the negative answers were: 'We only have information about prices through middlemen and the prices in Gurupá' (*Marajói*), 'We would like to know the daily price fluctuation of *açaí* during the season but it is not possible' (*Anjo da Guarda*), 'We don't know the prices of the places where the middlemen sell our produce' (*Gurupá*), 'We don't know the prices thus we don't have bargaining power towards middlemen' (*São João do Jaburu*); 'Lack of interest' (*Ilha das Cinzas*). On the other hand, the leaders that believe that the community is well-informed argued that 'The price of the manioc flour is always the same' (*Camutá do Pucuruí*), 'We know the prices in Gurupá' (*Alto Pucuruí*), 'We set the prices collectively' (*Ilha de Santa Bárbara*).

Three communities reached by the local community radio (out of the five involved in the study) were asked about the transmission of prices on the weekly programme of the Rural Workers Union. Leaders from all three had listened to the prices, and they were not different from what they expected ('There is not much variation', 'I don't have other information to compare with'). However, they believe that the community members do not usually listen to the prices due to lack of interest or other reasons they were not aware of. All respondents (from all 11 communities) agreed that it is important to listen to the prices of the same products every week because this will help them stay informed, follow the price fluctuations and thus negotiate a better and fair price with the buyers. For the municipality as a whole it is important to receive market information from Gurupá, Macapá, Belém and Breves, the main destinations of the local produce. Finally, all respondents believe that the transmission of product prices through the radio can be of great help in negotiating prices and payment conditions. According to the respondents, knowledge about prices is important to guide decisions such as where to sell or send the produce, and for how much. In addition to prices, other types of market information are considered important by the respondents such as i) prices of production equipment and

² *Alto Pucuruí*, *Camutá do Pucuruí* and *Jocó* are located in non-floodable áreas (*terra firme*).

techniques of manioc production (*Alto Pucuruí*); ii) commercial partners / prices of goods produced and consumed by the community (e.g. food); iii) demand/supply according to quality standards (*Anjo da Guarda, S.J. Jaburu, Ilha das Cinzas*); iv) production techniques to improve product quality, information about forest management.

THE HOUSEHOLDS

A total of 114 households were interviewed, represented by 42 men, 37 women and 35 couples. Ages ranged from 21 to 73, according to the table below:

Age range	Respondents	%
20 - 45	66	58
46 - 70	42	37
71 or more	6	5

Average number of children of the sample is 5.3 children/woman, and 81% of the listed children still live in their community of origin. 68% of respondents live in the community since birth, and 32% came from neighbouring communities/towns, or left their community of origin for a few years and moved back.

A high rate of respondents practice forest management, in particular sustainable management of *açaí* and *palmito*. Part of the respondents from the *terra firme* communities also practice sustainable management of timber. This pattern is result of the strong social movement that empowered the local communities to look after their natural resources sustainably.

Quadrant I: more access to market info, more distant from urban centre

- * *São João do Jaburu* (Sustainable Development Reserve Baquiá-Itatupã) - APROJA - Association of the Producers of the Jaburu River
- * *Ilha de Santa Bárbara* (Right of Use of Federal Land) - ATRAISB - Association of the Agroextractivist Workers of the Santa Bárbara Island

The above-listed communities were included in the first category/quadrant because they consider themselves geographically distant from the nearest urban centre (more than 5 hours by boat), although their access to market information is facilitated by the presence of public telephones (in both communities), two-way radios, NGOs (in particular *S.J. do Jaburu* where IMAZON was carrying out a project), regular boats (*Santa Bárbara* Island), and a significant number of local boats (approximately 30% of the families have their own boats). Also, the high participation rate in local associations (only one respondent from each community were not members) demonstrates the intense interaction between the families.

Most respondents from *Santa Bárbara* Island travel to Gurupá once a month, and to Santana (port city next to Macapá) between once a month to once a year (the distance to both towns is almost the same). Only two respondents from *S.J. do Jaburu* (out of 17) travel to Gurupá once a month, 10 travel between 1 and 3 times/year, and the majority travel to Santana between twice a month and once a year. These answers indicate that the communities have a periodical connection with both Gurupá and Santana despite their geographical distance from both.

The main sources of income in both communities include fisheries (fish and shrimp), *açaí*, *palmito*, timber, *andiroba* oil, social benefits and handmade fishing traps (*matapi*). Below is a table listing the main products traded and consumed by the households interviewed in both communities:

PRODUCT	Trade	Consumption	Season
Açaí	×	× (food)	Apr-Dec
Palmito	×		Jan-Dec
Fish	×	× (food)	May-Dec
Shrimp	×	× (food)	May-Dec
Cocoa	×	× (food)	Jan-Mar
Andiroba oil	×	× (medicine)	Mar-July
Timber	×	× (construction)	all year
Fishing traps (<i>matapi</i>)	×		all year
Murumuru	×		Mar-June
Buriti		× (food)	
Taperebá		× (food)	
Ingá		× (food)	
Cupuaçu		× (food)	
Pracaxi		× (medicine)	
Cipó alho		× (medicine)	
Cedro		× (medicine)	
Pára-tudo		× (medicine)	
Pau mulato		× (medicine)	
Najarana		× (medicine)	
Buiúçu		× (medicine)	
Cuarana		× (medicine)	
Jatobá		× (medicine)	

All respondents from both communities sell their produce locally, to middlemen who collect the products from their houses (*'porto de casa'*), and only a few (3 from *Santa Bárbara* Island and 2 from *S.J. do Jaburu*) sell their produce directly in Gurupá or Santana.

The majority of the respondents from *Santa Bárbara* Island usually sell their products (*açaí*, *palmito* and fish) to the same middlemen, and the explanations vary: 'He is a community member', 'He is a kind person', 'I know him since my parents' time', 'I get a better price', 'Security of always having a buyer', 'Trustworthy middleman who sell the products in town'. Those who don't necessarily sell their produce to the same middlemen argue that they sell to those who offer the best price, or to those who make an order in advance, and that they only collect the product after the middlemen arrive as a strategy not to lose the production. Payments are usually done in cash (*'a vista'*), and only in a few cases in kind (against food supplies). Most respondents try to negotiate prices with buyers/middlemen ('I ask for a good price when I am well informed', 'I discuss and expose my expenses'), and those who don't negotiate argue that they are not informed about prices and that it is useless to try to get a better price because they don't have another option. When asked about the quality of their relationship with middlemen over the past 5 years the majority of respondents was not enthusiastic but said that they prefer to sell to middlemen for low prices from home than having to travel to town (and thus spend time and money in fuel) to trade their produce. It is almost a consensus that prices are not fair ('Middlemen earn a lot', 'Income is not compatible with our expenses', 'Hard work for little return'). Most respondents were informed about product prices through acquaintances who had been in town and through the radio. The main sources of information about business opportunities are neighbours or relatives who travel to town (or when they travel themselves), middlemen, radio (mainly *Difusora de Macapá*) and two-way radio.

In *S.J. do Jaburu* the situation differs as the majority of the respondents do not necessarily sell their produce to the same middlemen, arguing that they sell to those who offer the

best prices. The cases where they tend to sell to the same buyers are explained by the fact that the middlemen who travel to the community are always the same, indicating a lack of option for some products, such as *palmito*. Like in *Santa Bárbara* Island, payments are normally done in cash ('a vista'), and in some cases against goods such as food supplies (frozen chicken, canned goods) or fishing traps (*matapi*). The majority of respondents from *S.J. do Jaburu* try to negotiate prices given by with buyers/middlemen, and half of respondents perceive that their relationship with middlemen has improved over the past 5 years ('Dialogue is possible', 'I impose a fair price because of the good quality of my product', 'Middlemen pay more if they can'). The other half expressed frustration with their dependence upon middlemen ('They set the prices'), and a feeling of inferiority ('They earn much more than us'). Like in *Santa Bárbara* Island, the great majority of respondents don't think they are selling their produce for fair prices under similar arguments. Only half of respondents were informed about product prices and sources of information included relatives/friends who had been in town, middlemen, telephone. According to the respondents from *S.J. do Jaburu* the main sources of information about business opportunities are neighbours or relatives who travel to town (or when they travel themselves), middlemen who pass by the community, telephone and radio (mainly *Difusora de Macapá*). For both communities, the main sources of information about production techniques are FASE and IMAZON staff. A few respondents also mentioned community meetings as a source of technical information, and only one informant mentioned the *Difusora de Macapá*. The most popular radio stations in both communities (they have access to the same ones) are the *Difusora de Macapá*, *Rádio Clube* and *Marco 0*.

In addition to the telephone, a large proportion of respondents from both communities (73%) have radios at home. A significant number of informants (58%) listen to the message programme broadcasted by the *Difusora de Macapá* (*Alô Alô Amazônia*) daily at 1pm, one of the only programmes that transmit the prices of *açaí*, fish and shrimp on a regular basis. A complementary finding is that over 60% of the informants don't think that the information they hear on the radio assist the production and trade of their products. Information that they consider important to be transmitted through the radio include prices of the main local products to help them negotiate with buyers and decide whether to travel to town or not, demand for and supply of products in town, and production techniques information.

Quadrant II: more access to market info, less distant from urban centre

- * *Anjo da Guarda* (not legalized) - APROSEM - Association of the Rural Workers of the Moju Sector
- * *Ilha das Cinzas* (Extractive Reserve) - ATAIC - Association of Agroextractivist Workers of Cinzas Island
- * *São Raimundo/Gurupá* (not legalized) - ATAISS - Association of the Agroextractivist Workers of the São Sebastião Island

The three communities included in the second quadrant have as common characteristics being located relatively close to the nearest urban centres - Gurupá and Santana - which according to the selection criteria means that the travel time is of less than five hours. In addition, all three communities have relatively good access to market information due to the frequent visits to Gurupá or Santana, access to communication tools such as two-way radio (*Ilha das Cinzas* and *Anjo da Guarda*), radio stations such as the 87 FM community radio (*Gurupá* and *Anjo da Guarda*) and the *Difusora de Macapá* (*Ilha das Cinzas*), and cell phones (*Ilha das Cinzas*). Thus, these are arguably the less isolated communities of the sample.

Also, all three communities have a high rate of boats/family (47%, 34% and 63%, respectively), which indicates a significant level of mobility of the families. For example, respondents from *Anjo da Guarda* community go to Gurupá between 1 to 4 times/month,

respondents from *Gurupá* go to Gurupá between once a month and 3 times a week, and only one respondent from *Ilha das Cinzas* travels to Gurupá once a week, and 5 between twice and three times a year. But given their proximity to Santana (4 hours by small boat) most respondents travel to Santana fairly frequently (between once a month and twice a week).

In terms of local activism (participation in local associations), while all respondents from *Ilha das Cinzas* are members of ATAIC, only two respondents (out of six) from *Anjo da Guarda* and four respondents from *Gurupá* (out of eleven) are members of the local associations. This data may be an interesting analysis indicator during the mid-term evaluation to be carried out after the broadcasting period (e.g. is local participation/community mobilization related to better level of market-related information?). The main sources of income in the three communities coincide in their majority, including *açaí*, *palmito*, fisheries (fish and shrimp), timber and social benefits. Below is a list of all forest products traded and consumed by the households interviewed:

PRODUCT	Trade	Consumption	Season
Açaí	×	× (food)	Mar-Nov
Palmito	×	× (food)	all year
Fish	×		June-Oct
Shrimp	×	× (food)	May-Dec
Cocoa	×	× (food)	Mar-Apr
Andiroba oil (and bark)	×	× (medicine)	Fev-June
Timber	×	× (construction)	all year
Fishing traps (<i>matapi</i>)	×		all year
Paneiros (basket to store açaí)	×		
Murumuru			Mar-June
Buriti	×	× (food)	
Bacuri	×	× (food)	
Graviola		× (food)	
Taperebá	×	× (food)	
Maracujá		× (food)	
Fruta pão		× (food)	
Ingá	×	× (food)	
Cupuaçu	×	× (food)	
Banana	×	× (food)	
Pracaxi (oil)	×		Fev-June
Cipó alho		× (medicine)	
Cedro (bark)		× (medicine)	
Najarana (bark)		× (medicine)	
Buiúçu (bark)		× (medicine)	
Maçaranduba		× (medicine)	
Anuerá		× (medicine)	
Verônica		× (medicine)	
Unha-de-gato		× (medicine)	
Sapucaia (nut)		× (food and medicine)	
Cupuçurana		× (bait)	
Jupati		×	
Madre azeite		× (medicine)	
Cashew (bark)		× (medicine)	
Melão São Caetano		× (medicine)	

Five (out of 6) respondents from *Anjo da Guarda* sell their produce to middlemen who come to their houses. Although they did not demonstrate loyalty to specific middlemen (trading happens on 'first come first serve' basis), there are not many options and they end up trading with the same buyers. Only two respondents travel to Jari to sell timber and *açaí* to local middlemen. In both cases payment normally is made in cash. All informants have radios at home, and their main sources of information about business opportunities are the local community radio (87 FM), middlemen and people who travel to Gurupá. Also, the community radio is an important source of technical/production-related information, in addition to young members of the community who are students of the Rural Family House (*Casa Familiar Rural*). All respondents listen to the community radio, and the majority follows the message programme (*Alô Alô Interior*) daily, as well as the *Sindicato* (rural union) programme. Half of the respondents think that information that they heard on the radio assisted their production and trade, and they believe that it would be important to have access to product prices of different places, and daily prices of key products during the high season. All respondents have listened to the prices transmitted by the *Sindicato* programme more than once and believe it is useful.

All respondents from *Ilha das Cinzas* sell their *açaí*, *palmito* and shrimps to middlemen who collect the produce from their houses (*porto de casa*), and seven (out of 15) also travel to Santana on a regular basis to trade timber, *açaí*, agricultural products and shrimps. According to the respondents who travel to Santana they have better bargain power when selling directly and thus get better prices as buyers do not try to put prices down. This can be explained by the fact that the direct negotiation in town (with both companies and individuals) involves fewer middlemen. As for the trading system through middlemen who pass by the community, while *palmito* and *camarão* are normally sold to the same middlemen (due to lack of option), the trade of *açaí* seems to be more competitive as the majority of respondents sells to those buyers who offer the best prices. The majority of the respondents said they negotiate prices with their buyers ('If the price offered is too low I don't sell', 'I try to discuss until we reach a consensus', 'I put the prices down if necessary'), while a smaller portion of respondents do not negotiate for a number of reasons such as 'We are not used to it', 'I don't want to risk my relationship with buyers', 'I prefer constant deals than trying for better prices', 'It is not possible to get better prices'.

The form of negotiations varies as both producer and buyer set and negotiate prices. This flexibility is reflected in the general opinion that the relationship with middlemen has improved over the past 5 years ('Dialogue is possible', 'We usually reach a consensus', 'We have established a long-term relationship'). However, one third of the respondents still believe that they are vulnerable and dependent on middlemen, who set the prices that are interesting for them and not for the producer. Also, it was interesting to notice that the majority of respondents is not happy with the prices for which they sell their produce ('Too much work for little return', 'Products are not valued', 'Income is not enough for any additional investment', 'Middlemen earn too much', 'Difficulties in taking the products directly to Santana'). Only one third of respondents were informed about product prices of the previous week, and sources of information included neighbours and relatives who had been in town, and the radio. Sources of information about business opportunities include people who travel to town, middlemen, and the radio (*Difusora de Macapá*). The main sources of technical information are FASE, the local association (ATAIC) and local students of the Rural Family House (CFR). The majority of informants (one third) have radios at home, and the most popular programme is the *Alô Alô Amazônia* message programme broadcasted by the *Difusora de Macapá* daily at 1pm. Through this programme they stay relatively well-informed about prices of *açaí* and fisheries. However, the majority of informants (80%) don't think that the information they hear on the radio are supportive to their productive activities, and the types of information that could be useful include

daily/seasonal product prices in town, technical information, products supply/demand information.

Finally, all respondents from *Gurupá* sell their produce (*açaí* and fish) both from home (to middlemen who pass by) and directly in Gurupá. It was interesting to notice that sales in Gurupá are always paid in cash, while middlemen tend to pay partly in cash and partly in kind (e.g. food supplies, fishing nets and traps). Also, while half of the respondents seem to be dependent on specific middlemen (who come in big fishing boats called *geleiras*) who spend the whole fishing season around, the other half seems to be aware of market prices and set the prices collectively to increase their negotiation power. *Açaí* is usually sold to those who offer better prices. The great majority of the respondents (with only one exception) said they negotiate prices with buyers/middlemen ('We discuss to reach a consensus and put prices down if necessary', 'When we are informed about prices practiced in town we try to get better prices', 'I set a higher price and put it down if necessary'). Both producers and buyers set prices to be negotiated, and the majority of respondents don't think that their relationship with middlemen has improved ('They impose their prices', 'We are manipulated by them', 'The relationship has not improved but I prefer to negotiate with him than to spend diesel to sell directly in town'). There is also consensus about the perception that they do not sell their produce for fair prices ('Too much work and risk for little return', 'Prices are low compared to the fuel price', 'The final price is much higher than what we get'). Only half of the respondents were aware of product prices of the previous week mainly through someone who was in town, and also through the radio. The main sources of information about business opportunities mentioned by the informants include people who travel to Gurupá (including themselves), and the community radio. As for sources of information about technical information, the majority of informants mentioned local associations (their own and those of neighbouring communities), and the Rural Family House (CFR).

Except 2 respondents, all have radios at home, and the most popular radio station is Gurupá's community radio (87 FM). The message programme (*Alô Alô Interior*) and the *Sindicato* programme (the only one mentioned that transmit product prices, in addition to publicity of local supermarkets) have a good local audience. In general respondents from *Gurupá* don't think that the information they hear on the radio are supportive to their productive activities (only 3 answers were affirmative). Suggestions of types of information that could help include daily product prices, publicity of their products, products supply and demand in Gurupá and other places, technical information on sustainable management of natural resources to help them increase the quality of their produce, product maintenance and processing. The majority of respondents answered that they listen to the *Sindicato* programme and that they heard the product prices several times, which they think is a useful service ('We are better informed', 'We take our produce to town aware of market prices', 'It increases our negotiation power').

Quadrant III: less access to market info, more distant from urban centre

- * *Alto Pucuruí* (Collective Title of Former Runaway Slave Community) - ARQMG - Association of the Former Runaway Slave Communities of Gurupá
- * *Marajoí - Sta. Maria de Nazaré* (Extractive Reserve) - ARTM - Association of the Rural Workers of the Marajoí River
- * *Marajoí - Divino Espírito Santo* (Extractive Reserve) - ARTM - Association of the Rural Workers of the Marajoí River
- * *Marajoí - São Tomé* (Extractive Reserve) - ARTM - Association of the Rural Workers of the Marajoí River

The communities included in this quadrant are the most isolated of the sample due to their distance to Gurupá and Santana (more than 5 hours away) and their difficult access to market information. In addition to being 'out of the way', located in tributaries and far

from their ‘mouth’, the average number of boats/family is low (18%, 16%, 28% and 24%, respectively). The local community radio reaches only *Alto Pucuruí*, and the three *Marajoí* communities have access to the FASE two-way radio network, their main communication channel with the outside world.

Respondents from *Alto Pucuruí* go to Gurupá between 1 and 3 times/month, while 50% of the respondents from the 3 *Marajoí* communities go to Gurupá once a month, less than 10% go twice a month, and the remainder travel between once and three times/year. In *Alto Pucuruí* all respondents were born in the community and are members of the local association, while only two respondents of the three *Marajoí* communities are members of the local association.

The main sources of income in *Alto Pucuruí* are manioc flour and social benefits (*Bolsa Família* and pension). In the *Marajoí* communities the main sources of income are *açaí*, *palmito*, *pupunha*, *cupuaçu*, manioc flour and social benefits. The products differ quite a bit due to the different ecosystems in which the communities are located (*terra firme* or non-floodable area and *várzea* or floodable area, respectively). All forest products traded and consumed by the selected households are listed below:

PRODUCT	Trade	Consumption	Season
Açaí	×	×	Jan-Sept
Palmito (palm heart)	×		all year
Fish		×	
Manioc flour	×	×	all year
Game		×	
Andiroba oil (and timber)		×	
Timber	×	×	all year
Buriti		×	
Taperebá (bark)		×	
Maracujá		×	
Cupuaçu		×	
Pracaxi (oil)		×	
Cedro (bark)		×	
Verônica		×	
Unha-de-gato		×	
Cashew (bark)		×	
Castanha		×	
Bacaba		×	
Mari		×	
Piquiá		×	
Uxi		×	
Copaíba (oil)		×	
Honey		×	
Ajará		×	
Pupunha	×	×	Jan-Apr
Inajá		×	
Sucuba (bark and milk)		×	
Carapaná (bark)		×	
Barbatimão		×	
Eumiri (bark)		×	
Ipê-roxo		×	

Jatobá (bark)		✕ (medicine)	
Patová		✕ (food)	
Anani (bark)		✕ (medicine)	
Cumaru (seed)		✕ (medicine)	
Copaíba (bark)		✕ (medicine)	
Amapá (milk)		✕ (medicine)	
Sucupira (bark)		✕ (medicine)	
Umiri (bark)		✕ (medicine)	
Matapá		✕ (medicine)	
Pracuúba doce		✕ (medicine)	

All respondents from *Alto Pucuruí* sell their produce (manioc flour) directly to small supermarkets in Gurupá, and most of them get paid in kind (against food supplies). Only one respondent tries to negotiate prices sometimes, and the others try to sell their produce as soon as possible for the prices offered by the buyers so they can go back home quickly. However, they are aware that they are not selling their manioc flour at fair prices ('Too much work for little return'). Three (out of 5) respondents were informed about prices of products of the previous week due to their presence (or of relatives or neighbours) in Gurupá. Only one respondent have radio at home, and the main source of information about business opportunities and technical information mentioned are people from the community who travel to Gurupá. The most popular radio stations in the community are the community radio (87 FM), *Rádio Santos* and *Rádio Clube*, and the programmes they listen to include the message programme (*Alô Alô Interior*) and one religious broadcast (transmitted just before the message programme, at 5.50pm daily). The respondents didn't mention any programme as source of market information. Suggestions of market-related information that can be useful to be transmitted through the radio include product prices (including products that they produce - mainly manioc flour - and consume) in different places, information on production techniques. The majority of the respondents had heard the product prices transmitted by the *Sindicato* programme at least once, and they consider the initiative useful in terms of access to market information which can potentially increase their negotiation power.

Of the 31 respondents from the three *Marajoí* communities, the great majority sells their produce exclusively from home to middlemen who pass by, and payment is made both in cash and in kind (against food supplies). The exceptions are two respondents who sell their produce directly in Gurupá to the *Mercado* (the biggest local supermarket), but who also get paid partly in cash and partly in kind. Approximately half of the respondents are not loyal to specific middlemen but sell to those who offer the best conditions or on 'first come first serve' basis. The other half sells at least one product (*açaí* or *palmito*) to the same middlemen. When asked why, the answers indicated different reasons such as 'they buy in big quantities', 'we are friends', 'he is the only one who comes', 'he is open to negotiations', 'we have a pre-set deal'. Only half of the respondents try to negotiate prices with buyers ('Prices vary according to quantity', 'We set prices collectively', 'I try to talk to them and get a better price', 'I sell to those who offer better prices'), while the other half feels incapable of negotiating with middlemen ('I cannot convince them to increase the price', 'It is not possible to negotiate because the prices of the exchange goods are absurd', 'I don't have information about prices in town', 'I don't have a boat thus I don't have another option', 'I don't know how to negotiate', 'I am not used to it').

One third of the respondents from the *Marajoí* communities asserted that their relationship with middlemen improved over the past 5 years ('We became friends', 'I have the possibility of selling in big quantities', 'He pays timely', 'Prices have improved'), while the majority did not feel any improvement ('They still set the prices', 'We depend on them and do not have any negotiation power'). The vast majority of these respondents don't think they sell their produce for fair prices ('Too much work', 'What we get is not

sufficient to survive', 'Products traded by middlemen are extremely expensive', 'Prices are much higher in town', 'Product is not valued'. For the majority of respondents from *Marajoí*, the only source of information about product prices and business opportunities are people from the community (including themselves) who travel to town and return with updated information. In *Divino Espírito Santo* middlemen are also considered as an important source of information. There is a general lack of access to technical information in the area. Less than half of the respondents from the 3 communities have radios at home, and the most popular radio station is *Rádio Clube*. Those families who listen to the radio (approximately half of the respondents) have the communication tool mainly as a source of entertainment (music, sport). Suggestions of potentially useful market information that could be transmitted through the radio include product prices in different places (mainly *açaí* and *palmito*) that can increase their negotiation power, information about land tenure (Extractive Reserve), technical information about how to increase the quality of *açaí* production. However, 3 informants don't believe that information on product prices will support their negotiation process as the middlemen are too powerful and set the negotiation terms.

Quadrant IV: less access to market info, less distant from urban centre

- * *Camutá do Pucuruí* (Agro-extractivist Settlement) - ATRCP - Association of the Workers from Camutá do Pucuruí
- * *Jocojó* (Collective Title of Former Runaway Slave Community) - ARQMG - Association of the Former Runaway Slave Communities of Gurupá

Finally, the fourth quadrant includes two communities that despite their relative short distance to Gurupá (less than 5 hours of travel), they consider themselves isolated in terms of access to market information. Respondents from *Camutá do Pucuruí* go to Gurupá between 2 and 4 times/month, and respondents from *Jocojó* go to Gurupá between 2 and 6 times/month.

Level of participation in local community associations is high among the sample households, as 100% of the respondents are members of their respective associations. In both communities the main source of income is the trade of manioc flour (note that both are *terra firme* communities). Below is a list of all forest products traded and consumed by the interviewed households:

PRODUCT	Trade	Consumption	Season
Manioc flour	×	× (food)	all year
Pupunha	×	× (food)	Jan-Apr
Uxi (fruit and bark)	×	× (food and medicine)	Mar-Apr
Piquiá	×	× (food)	Mar-Apr
Cipó (liana)	×		all year
Timber	×	× (construction)	all year
Açaí	×	× (food)	July-Dec
Bacaba	×		Nov-May
Cupuaçu	×	× (food)	Jan-May
Castanha (Brazil nut)	×	× (food)	Jan-May
Pineapple	×		all year
Copaiba (oil and bark)	×	× (medicine)	July
Mari		× (food)	
Honey		× (medicine)	
Ajará		× (food)	

Cumaru (seed)		✕ (medicine)	
Buriti		✕ (food)	
Jutaí (bark)		✕ (medicine)	
Amapá (milk)		✕ (medicine)	
Andiroba (oil)		✕ (medicine)	
Sucuba		✕ (medicine)	
Pau doce (bark)		✕ (medicine)	
Anuerá (bark)		✕ (medicine)	
Unha-de-gato		✕ (medicine)	
Verônica		✕ (medicine)	
Carapanaúba (bark)		✕ (medicine)	
Game		✕ (food)	
Breu branco		✕ (medicine)	
Envira preta		✕ (medicine)	
Jatobá (bark)		✕ (medicine)	

All respondents from *Camutá do Pucuruí* and *Jocojó* sell their products directly in Gurupá. This can be explained by the geographical setting of both communities (not distant from Gurupá, 'out of the way' for middlemen, *terra firme* communities). In Gurupá they usually sell their products to different buyers, such as local supermarkets and individuals. A general opinion is that the local supermarkets pay low prices and usually against goods, so many respondents try to sell their produce directly at the port at better prices, leaving the local shops as a last option to prevent losing the production.

When asked about price negotiation, only half of the respondents from both communities try to negotiate prices ('I try to get a better price', 'I try to get information on prices in Macapá to make a better deal', 'I sell for lower prices when necessary', 'If supply is low I ask for higher prices'), while the other half don't negotiate ('I'm used to sell at the same prices', 'We are not united, and to negotiate alone does not work', 'Prices only oscillate when fuel prices increase', 'I sell for the prices practiced by the majority'). In *Camutá do Pucuruí*, the prices are usually set by the buyer, while in *Jocojó* the producers set the price and the buyers try to negotiate. As for the prices, only five out of the twenty respondents from both communities believe that they sell their produce for fair prices. The main argument is that the work load is too heavy for what they get ('Too much work for little return'). Some respondents also argued that the products are not given their proper value, that buyers do not have enough money to pay better prices, and that it is possible to obtain better prices. Those who seemed happy with the prices did not explain why.

The majority of the respondents were informed about product prices of the previous week, and sources of information about prices and business opportunities included i) a neighbour or relative was in town; ii) the respondent was in town; iii) radio (especially *Jocojó*). The main sources of technical information mentioned were FASE, local students of the Rural Family House (CFR), and in *Jocojó* the radio was also mentioned by a few informants. Of the 14 families interviewed in *Jocojó* only 2 don't have radio at home, and the community radio is by far the most popular radio station locally (in particular the *Alô Alô Interior* message programme), and all respondents asserted that the community radio supports their productive activities. All respondents had heard the product prices transmitted by the *Sindicato* programme, which they consider useful ('We stay well informed', 'It is the ideal information for the rural worker', 'We know the prices before taking the produce to town'). Suggestions of potentially useful market information that could be transmitted through the radio include product prices (including other forest products with commercial potential) and business opportunities in different places, product information, production techniques to improve the quality of produce, alternative medicine.

In *Camutá do Pucuruí* only half of the respondents have radio at home, and at the time of the study the community radio was not reaching the community (the main radio station mentioned was *Rádio Santos* (in particular the news programme). Information that could potentially support the local economy include product prices (in particular manioc flour and timber) and their respective supply/demand in different markets, transport information. Three respondents (50% of total) had heard the product prices transmitted by the *Sindicato* programme more than once, which they consider beneficial in terms of access to information.

RADIO MESSAGES

A total of 444 messages were collected between 14 March and 30 April 2008. These represent all messages received at the community radio studio, and transmitted through the *Alô Alô Interior* programme. After analysing and coding all messages the conclusion was that 6% (25 messages) of the total sample related to trade and consume of forest and agricultural products. Below are some examples of such messages:

Message to Senhor Rozivaldo, known as Rozinho. I inform that I negotiated your castanha (Brazil nuts) with a buyer. He will arrive on Sunday to pay you. Signed: Agenor Pombo.

Message to Mário Pastana, Manduca and Carlos from Mambuaçu River. I ask you to cut the banana because I am coming down tomorrow (to collect it). Signed: Filho do Jorge Santos.

Message to Taueré from Pucuruí. Josi asks Paulo to bring her manioc flour on Friday - she will pay when you arrive. Signed: Antonio.

Message to Uruaí River. Álvaro, if possible bring me 2 kg of fish - we discuss the price here. Signed: João Leite dos Santos.

Note that the messages were collected during the rainy season, characterized as the 'non-productive' season. Thus, it would be important to carry out a second message collection during the dry/productive season (second half of the year). Then, further collections should ideally be carried out during similar periods after the radio workshop, thus aiming at identifying potential impacts of the transmission of regular market information, in addition to the interview data.

CONCLUSIONS

- ✖ Current level of knowledge / sources of information are limited in all communities, in particular in those who are more isolated in terms of geographical location, means of communication and transport (these are more dependent on information brought by middlemen). Those informants who have more trading options (e.g. direct sales in urban centres) have increased negotiation power.
- ✖ Relationship between producers and middlemen is varied: for the more isolated communities they are the only source of information and the only possibility of trading their produce and buying food supplies, for the less isolated they are one among other options, such as trading the produce directly in town, and for a few (e.g. *Alto Pucuruí* and *Jocojó*) they don't play a role in the local economy.
- ✖ Demand for market information is very high. A significant portion of respondents relates knowledge of market information to improved negotiation power. The majority of respondents is aware that they sell their produce for low prices, feels exploited by middlemen, understand that individual negotiation is not effective.
- ✖ According to the data collected, the following information should be included in the agenda of the radio workshop: product prices (forest and agricultural products) in

different markets (Gurupá, Belém, Macapá, Breves), information on demand and supply of products (giving voice to the producers and connecting them to potential new markets/buyers), technical information about forest management, production techniques, alternative uses of forest resources.

- × Products/themes to be included in the radio broadcasts according to dry and rainy seasons: consolidate table of traded and consumed products.

3) Radio Workshop in Gurupá

Based on the results of the Baseline Study, efforts were concentrated around the organization of the Radio Workshop in Gurupá, one of the most fundamental activities of the whole project. The objective of the Radio Workshop was to equip local people (staff members of the local community radio and representatives of different sectors of local society) with knowledge and techniques on how to capture, systematize and transmit information related to forest-based economy through the radio. In particular, the workshop enabled the engagement of the community radio and the local society in the project, as a new space had just been opened in a daily programme to transmit NTFP-related information.

The workshop was carried out during the 14-16 Nov 2008 period, and the previous months were dedicated to a number of preparatory activities, until the funding from the EU (through the project Bridging the Divide: Enhancing Forest Tenure, Management and Marketing in the Brazilian Amazon) and IFS (International Foundation for Science) became available. Both sources of funding were only fully confirmed towards the end of September. During this 'waiting period' I received approximately 40 issues of *Prosa Rural* in CDs (radio programmes produced by Embrapa, main Brazilian research centre for agricultural and forestry issues), which were donated to Gurupá's community radio. Also, I maintained contact with CIFOR colleagues to check the status of production of *Frutíferas* radio programmes, which unfortunately were not ready on time to be used during the radio workshop.

Having received the confirmation from both funders I proceeded to the organization of the workshop. The first step was a meeting with Mara Régia Di Perna (radio journalist hired to conduct the workshop) to agree on the details of the workshop: date, content, objectives etc. This meeting took place in São Paulo on 17 October, one month before the workshop. During this month we worked very intensively on the whole workshop organization, including:

- × Partnership proposals sent to *Rádio Nacional da Amazônia* and *Rádio Difusora de Macapá*;
- × Confirmation of workshop date with partners from Gurupá;
- × Design of workshop agenda and evaluation form with Mara Régia (attached, in Portuguese only);
- × Acquisition of equipment and materials necessary for the workshop (tape recorders, batteries, CDs, DVDs, radio-related films, office supplies, NTFP-related publications etc.);
- × Organization of logistics of radio workshop in Gurupá based on agreed timetable (14-16 Nov), which involved selection of participants, hotel reservations, boat trip logistics, dialogue with project partners (mainly CIFOR and IMAZON), flights.

On 11 Nov I flew to Belém where I had meetings with partners organizations (CIFOR and IMAZON), and on 11 Nov Mara Régia and I had a very productive meeting with the Director and staff of *Rádio Difusora de Macapá*, which showed a lot of interest in collaborating. They offered one technical staff member (Celso Rabelo) plus equipment to join the workshop, which gave a real quality upgrade to the workshop, not to mention the

partnership potential between the *Difusora de Macapá* (a governmental radio) and the community radio of Gurupá. In addition, *Rádio Nacional da Amazônia* approved the partnership proposal and sent two professionals (one audio operator, Gustavo Neto, and one reporter, Andhrea Tavares) to join the workshop team. In sum, the approach with both radios was extremely successful, which increases the impact potential of the project as a whole.

The workshop was very rich in terms of contents, including voice, text writing, audio and interview techniques, practical workshop in neighbouring rural communities, as well as discussions about community radio management, legal constraints among other relevant issues related to radio communication in the research context. Below is an evaluation of different aspects of the workshop from the project's perspective:

LOCAL INFRASTRUCTURE

Gurupá has a very poor telecommunication infrastructure. There are only a few public telephones in town and many of them are out of order. Very few inhabitants have their own telephone line or internet access. Internet signal, by the way, is very unstable and unreliable. These problems represent significant obstacles for a smooth information flow during the project and thereafter. The project success depend on a good communication flow between the actors involved (coordination, partners, local collaborators), which means that extra efforts will be needed if the project results are to be achieved.

COMMUNITY COMMUNICATION

The local community radio - *Rádio Comunitária Educadora de Gurupá 87,9 FM* - is of extreme importance for the region, and for many communities represent the only form of communication. Its main local competitor is a local commercial radio, which operates without legal authorization. Both operated illegally at the time of the workshop, but it is important to mention that today the community radio is formally legalized. It is also important to remember that the 9.612/98 Law, which regulates the operation of community radios in Brazil, allows the use of a transmitter of not more than 25 Watt of power, which means a reach of approximately 1km of ray, an irrelevant distance in the vast Amazonian context. Other accessible radios are the public *Rádio Difusora de Macapá* and *Rádio Nacional da Amazônia*.

TECHNICAL ANALYSIS OF THE COMMUNITY RADIO EQUIPMENT

During the workshop days, the audio technicians Gustavo Neto (EBC) and Celso Rabelo (*Rádio Difusora de Macapá*) carried out a detailed analysis of the conditions under which the community radio was operating. They found significant technical and management problems that can seriously compromise the potential of the community radio as a local development tool. According to their analysis, a restructuring process would be needed if the radio was to meet both the legal framework as well as the daily technical and operational needs. In order of priority, the following services were recommended:

- × Re-installation of existing equipment and installation of new tools (according to list provided by them);
- × Installation of softwares and related training workshop;
- × Capacity building of community radio staff (in particular audio operators);
- × Capacity building of network administrators.

The cost of these complementary actions was raised, but unfortunately no funding was found to support the upgrade of the community radio. However, after the workshop Celso Rabelo (*Rádio Difusora de Macapá*) returned to Gurupá a few times to support the radio as a volunteer. Also, during and after the workshop the audio professionals offered maintenance and upgrade services of the community radio existing equipment (e.g. fixed

microphone cables, installed new softwares, cleaned up the computer hard disk). During the workshop, 5 tape recorders were donated to the community radio.

THE WORKSHOP

The radio workshop opened up a range of new perspectives for the 35 participants. Talents were revealed, many with potential to become local popular reporters. The workshop was positively evaluated by the participants, in particular in terms of accessible language in which the contents were presented, always relating them to the local reality. The radio workshop proved to be a successful initiative itself, independently of the research project, for it provided 35 local actors with technical and political tools that will invariably positively impact the local understanding of the potential of the community radio for improving local life quality. From this perspective, this pilot workshop could potentially become a permanent initiative of community-based information production and dissemination.

However, for this to happen, it is essential to develop an ongoing mechanism of information generation and flow among the involved actors: researchers, local organizations and community radio. Only then the community radio will become a tool to support the local forest-based economy. In this sense, the following actions were agreed during the workshop:

- ✕ Project coordinator (Mônica Barroso Keel) keeps in touch with responsible for the broadcasting of forest-related information (Allen - Adelino Pantoja). The information will be broadcasted during a 15-minute section (*Viva Amazônia*) of the daily programme called *Manhã Alegre Educadora*;
- ✕ Allen and Elissandro (collaborator of *Casa Familiar Rural*, rural school) committed to stay in touch on a regular basis to make information from the rural areas arrive at the community radio;
- ✕ Project coordinator keeps in touch with project partners (CIFOR, IMAZON, Embrapa Amazônia Oriental etc.) to constantly feed the community radio with updated information. A number of sources were donated to the community radio during the radio workshop such as *Frutíferas*, *Receita sem Palavras* (uses of medicinal plants), and approximately 40 CDs of '*Prosa Rural*', produced and donated by Embrapa. Community radio members committed to register with Embrapa in order to receive the new programmes on a regular basis;
- ✕ Project coordinator liases with partner radios (EBC, *Difusora de Macapá*) to guarantee continuity of the partnership started at the radio workshop. Celso Rabelo (*Difusora de Macapá*) offered to be a point of contact and assistance in Macapá;
- ✕ Community radio coordinators committed to carry out management changes based on the analysis of the audio professionals.

In sum, the workshop was extremely successful, with approximately 35 participants representing different sectors of local society: students, community radio staff, representatives of local institutions such as the Rural Workers Union, local government, the Catholic Church. The gender balance of the participants was reasonable, and the final result was an extremely motivated group of people, apparently engaged and committed to a better use of the local community radio as a vehicle to promote citizenship and support the local populations. See a short selection of images at the end of this report (Appendix III).

After the workshop, the main challenge was to maintain the level of motivation high through constant contact with the community radio, activating the partnerships initiated with the 2 governmental radios, as well as guaranteeing a productive link between the local radio and the project partners. In particular, it is very important to make sure that the new radio programme launched just after the workshop, which would serve as the

main monitoring tool of the project, is produced and broadcasted on a regular basis to enable the mid-term evaluation originally planned for mid-2009.

4) Broadcasting Period

After the radio workshop I came back to São Paulo, my residential basis, aware of the challenges inherent to the broadcasting period of the subsequent months. The main activities of this period consisted of monitoring the transmission of the new radio programme (*Viva Amazônia*) with focus on forest economy launched during the radio workshop in Gurupá among other post-workshop responsibilities as described below:

- ✕ Finalize systematization of radio workshop;
- ✕ Update project reports / materials, posting information online to make the project known to a wider audience;
- ✕ Make sure that Gurupá's community radio register at Embrapa's website to receive the Prosa Rural programmes on a regular basis;
- ✕ Check status of production of *Frutíferas* radio programmes;
- ✕ Identify and collect other sources of scientific data and feed the responsible radio broadcaster (DJ Allen) with enough information in accessible language to be transmitted during his daily programme (*Viva Amazônia*);
- ✕ Keep regular contact with the local community radio to monitor the transmission of the *Viva Amazônia* programme and to make sure that the information exchange between Elissandro (based at the *Casa Familiar Rural*, who will be responsible to centralize information and news from the rural communities and send them to the community radio broadcaster, DJ Allen) and DJ Allen is happening;
- ✕ Potentialize the partnerships initiated with *Rádio Nacional da Amazônia/EBC* and *Rádio Difusora de Macapá*;
- ✕ Make an effort to raise funds necessary to restructure Gurupá's community radio (according to diagnostic provided by the two technical staff who joined the workshop team the radio infra-structure and capacity building of local staff needs to be restructured, otherwise the radio won't survive for much longer);

The original idea was to monitor the radio broadcasts during approximately 4 months, with the assistance of a local field collaborator, possibly someone who works at the radio studio (e.g. Rôsula). This assistant would proceed with the collection of messages and letters and make sure that the 'Forest Goods radio broadcasts' were properly transmitted and the data updated on a regular basis. I have maintained regular telephone contact with the field assistant during this period, while planning the next stage of the project, which would consist of a second set of interviews with the same small holders after the radio programmes have been broadcasted (possibly during January 2009).

According to the phone conversations, the new programme broadcasted by Allen was very well received by the audience, and shortly after the radio workshop the community radio acquired a new transmitter which greatly increased the reach and impact of the community radio as a whole. News were always positive and promising.

According to a revised plan, I would go back to Gurupá to carry out the mid-term evaluation during the second half of 2009, but due to a number of factors this final stage could not be carried out, as reported below.

5) Mid-Term Evaluation

First, during the project (between end of 2008 and beginning of 2009), CIFOR closed its offices in Belém due to institutional decisions at the international level, and the project supervisor, Patricia Shanley, left the organization. From this moment, it was decided that

the project's institutional base should be Imazon. This change was a positive one, since most of the funding for the radio workshop and the mid-term evaluation would come from the EU-funded consortia in which the radio project was inserted.

Also in 2009, FASE's activities in Gurupá were discontinued, and the Gurupá Institute (*Instituto Gurupá*) was created by the local social movement as a strategy to continue the ongoing activities, so the local partnership was not so clear anymore, as FASE Gurupá was the official local partner of the EU-funded consortia.

By the time I was ready to go back to the field and carry out the mid-term evaluation, I was informed that the EU funds were no longer available. The deadlines of the consortia programmes had expired, and instead of re-negotiating a new work plan, the EU decided to discontinue the support. This was the most difficult period of the research, and I started to look for potential funding partners for this final field trip. Unfortunately my fundraising efforts were not successful, both nationally and internationally, and in agreement with the Rainforest Alliance the project has been finalized, leaving this report and the manual for community radios and researchers as final products.

6) Final Reporting and Implementation of Dissemination Strategy

Given that it was not possible to carry out the second set of interviews to compare with the baseline interviews, the final conclusions considered the rich data of the baseline study, plus the impressions and results of the radio workshop, complemented with phone conversations and exchange of e-mails with local players during 2009 and first half of 2010.

MAIN FINDINGS / LESSONS LEARNED

- × ***Better informed commercialization of NTFPs enhances the livelihoods of isolated small holders as well as the conservation of forest biodiversity in Brazilian Amazonia.***

Yes, we can confirm the hypothesis raised at the start of the project. Once relevant information reaches its target audience, it has the power of shaping people's attitude and behaviour related to the production and trade of forest products. Along the research experience this premise was practically never questioned, with very few exceptions. On the contrary, it was frequently mentioned and stressed. For example, access to updated market information was related to improved negotiation power, social organization and a feeling of belonging to the society. The challenge is to reach this stage of well-informed small holders, considering the enormous infra-structure challenge in the complex Amazonian context such as poor telephone and internet connection, important complementary tools to the radio.

- × ***Useful information is practical, accessible and continuous information.***

The tool is there, ready to be used. The radio is accessible to rural people, there is no doubt about it. The challenge is the quality and reliability of the information. In Gurupá, I observed a lack of interest and motivation of the community radio management in giving priority to social, economic and environmental contents. In turn, priority was given to superficial entertainment programmes, which are important but should not be base of any community radio. A community radio has a political role to play, specially in remote and isolated areas such as Gurupá, and this paradigm change is a challenge to be considered. Also, information must be practical, accessible and reliable. It takes time for a radio programme to attract a loyal audience, thus there must be continuity in the transmission of information. It is not sufficient to inform listeners about NTFPs prices only once or twice a year, it must be an ongoing initiative in order to have a long-lasting impact in people's lives.

× ***Traditional knowledge must be merged with scientific data.***

Local knowledge is one of the richest sources of information, and must be included in radio programmes designed to transmit NTFP-based information. Ideally, local/traditional knowledge should be merged with scientific data. Local information can be collected through a network of community-based popular reporters, in partnership with the local community radio. They need to be minimally equipped (a tape recorder, batteries and tapes are enough) and a realistic communication set up must be established. On the other hand, scientific knowledge needs to reach the community level, otherwise it has no potential of changing realities. This fusion must be an intentional initiative, resulting in accessible and revolutionary information for all.

× ***Local collaboration is crucial - local politics need to be understood and considered.***

A research project such as this one can only succeed if local actors are actively involved and motivated, especially after the researcher leaves the field. My experience demonstrated that when I was present, carrying out fieldwork, local people were motivated, ready to collaborate. On the other hand, during the periods that I was not there, it proved really difficult to keep the research project on the agenda with the same level of motivation and involvement. Thus, a strong local base must be built before leaving the field for longer periods.

× ***The right information to the right audience at the right time.***

A radio programme designed to transmit information on the forest economy must consider its audience's life style. Timing is one of the most important success factors of such an initiative, thus the importance of establishing close links with local initiatives that are genuinely community-based. The partnership with the EU-funded consortia through Imazon was very positive and constructive, as it potentialized a related initiative that was already under way. For example, they had already established a partnership to collect and transmit product prices, which enabled me to analyse - based on facts - the best times of the day to include the product prices, the best day of the week, and so on.

× ***The right connections and the importance of two-way information flow.***

Isolation is the most critical problem in places like Gurupá. Hence, one of the biggest challenges of gathering relevant and updated forest-related research data is to establish the right partnerships. Partnerships with local radios, NGOs and research institutions are the point of departure, as well as a small team of committed people that will be the point of contact with the external partners. A further challenge relates to the funding needed to remunerate community radio workers, which are usually passionate volunteers who need to make a living through other activities.

× ***Appropriate technology - a big issue.***

Despite the rise of new technologies, especially the internet, the radio is still the most relevant communication tool in Brazilian Amazonia. This is unquestionable, so the tool still deserves attention and investment. The radio is local people's best friend, companion, informant. Also, the radio values oral tradition, a strong characteristic of forest people. The internet can be a valuable support and source of information, but the radio is the main channel to reach the riverine communities, the base.

× ***Community-based news agency - a possible dream?***

Initiatives such as the one proposed by this research project can effectively make a difference in forest people's lives, but in order to have a real impact they need to happen collectively, in an integrated way across the region. During the research process, the main question was 'how to centralize the collection, translation and dissemination of relevant forest-related research data? How to guarantee the constant flow of information?' One of the possibilities would be the development of a community-based news agency linked to

regional networks such as the Sustainable Amazonia Forum, or organizations such as Repórter Brasil. Such service would be highly relevant and even revolutionary for forest dependent communities, so vulnerable and isolated partly because they don't have access to informative and timely information. Themes such as market prices, forest management, value addition, environmental services, related policies among others would be part of the news agency agenda.

DISSEMINATION STRATEGY - OUTPUT PRODUCTS

Based on the whole research experience and conclusions, I then proceeded to the development of the output products, mainly a small manual for both radio broadcasters and researchers, which expects to indicate how to convert scientific data and traditional knowledge into comprehensive and relevant radio programmes. Also, this final report represents a basis for related reports and articles which analyses the whys and wherefores of the project, informing and inspiring similar initiatives. Below is a brief description of each output:

a) **Manual for Radio Broadcasters and Researchers:** by having the work better explained and packaged its replicability can be enhanced. Thus, to accompany the Forest Goods radio programmes a small manual for radio broadcasters and researchers would help to explain how to produce new sets of radio programmes using different sources of scientific information in different contexts. The creation of a project website has also been considered, but given the funding limitations it was not implemented.

b) **Final Report registering the Research Process + Results:** a final report (this one) which describes and analyses the project can take the initiative to the scientific community, perhaps serving as an example to be followed elsewhere.

The network of dissemination partners was developed during the research process, and the manual will be further disseminated through different networks in Brazil.

Finally, it is important to mention that an evaluation component was a constant concern during the whole research process. Thus, the evaluation of the project can be divided into 3 categories: (i) replicability (development of a scaling up strategy, dissemination of output products such as the production of the manual described above); (ii) reliability (explain and document research procedures in periodical and final research reports); and (iii) validity (develop additional triangulation methods to ensure methods are well implemented, get feedback through peer review at conferences/meetings).

All stages described have been carefully designed in order to give the project practical relevance and application, but also scientific rigour. In spite of the concrete development-oriented research outputs indicated, the research procedures follow the principles of scientific research, from the application of scientific research methods during the baseline study and the post-broadcasts evaluation to the analysis process. Directly, a set of new scientific knowledge was generated by this research project during the different stages, such as (i) data on patterns of behaviour and knowledge base of small holders engaged in NTFPs trade in Gurupá; (ii) systematization of traditional knowledge related to the production and different uses of NTFPs; (iii) synthesis of market data of selected NTFPs; (iv) new evidence to contribute to at least 2 bodies of literature, namely (a) communication for development/management of natural resources and (b) knowledge and action/knowledge transfer. Indirectly, with the creation of this innovative dissemination channel (local radio networks) we expect to stimulate the generation of new scientific knowledge in the region.

Project Timetable

Year 1: July 2007 - June 2008

[illegible]

Year 2: July 2008 - June 2009

[illegible]

Year 3: July 2009 - June 2010

[illegible]

Project Budget

Linking Market Intelligence and Remote Villagers Project Budget			
RESEACH STAGE	DETAILS	Cost (USD)	Funding Source
Planning (July 07 - Feb 08)			
Flight São Paulo-Belém-São Paulo	Chief investigator (Mônica)	947	IFS
Hotel + Meals Belém	Hotel Sagres	410	IFS
	Biodiversity in the Brazilian Amazon, Amazonia Map, Almanaque Brasil 2008, The Last Forest, Livro de Ouro da Amazônia		
Literature		213	IFS
Taxis Belém		36	IFS
Total Planning		1,606	
Baseline Study (Mar - Apr 08)			
Boat Fuel	Diesel	957	IFS
Boat Fuel	Petrol	1,026	IFS
Food supplies		711	IFS
Cook	On board	150	CIFOR
Local carriers	Santana port, Gurupá	45	CIFOR
Remmuneration Assistant 1	Anne Gander	900	CIFOR
Remmuneration Assistant 2	Iva Soares	240	CIFOR
Remmuneration Assistant 3 (community radio)	Rôsula Pantoja	120	CIFOR
Local flights Belém-Macapá-Belém	Assistant 1, Assistant 2	455	CIFOR
Flight São Paulo-Macapá-São Paulo	Chief investigator (Mônica)	1,005	CIFOR
Hotel Santana (Macapá port)	2 nights	69	IFS
Taxis Macapá		99	IFS
Accomodation in Gurupá	9 nights, Assistant 1	81	CIFOR
Meals in Gurupá		177	CIFOR
Regular boat transport Gurupá-Santana	Chief investigator, Assistant 2	60	CIFOR
Per diem local community assistants	Boat drivers	156	CIFOR
Meals in Macapá		77	IFS
Various Assistant 1	Fuel, flight change fee, phone cards, flip flops	66	CIFOR
Office supplies	Photocopies, folders, batteries, tapes	151	IFS
Total Baseline Study		6,544	
Radio Workshop in Gurupá (Nov 2008)			
Stereo, tape recorders, DVD player, microphones, loudspeakers (for radio workshops)	To be used during radio workshops	243	IFS
Depreciation of hardware	Chief investigator	500	IFS
Communication materials for radio workshops	Books, manuals, CDs and DVDs	142	IFS
Remmuneration radio consultant	R\$1500x5 days + R\$750x3 d	3,375	EU
Flight Brasília-São Paulo-Brasília	Workshop preparation	239	EU
Taxis, meals, hotel Brasília/São Paulo	Workshop preparation	208	EU
Flight São Paulo-Macapá-São Paulo	Chief investigator	906	EU
Flight Brasília-Macapá-Brasília	Radio consultant (Mara Régia)	507	EU
Fuel (diesel and petrol)	Boat transport Macapá-Gurupá	1,398	IFS
Boat-related expenses	Carriers, food, port fees etc.	313	IFS
Regular boat tickets	5 tickets, Gurupá-Santana	300	IFS
Meals in Gurupá	20 people, 3 days (75/person)	775	IFS
Accomodation in Gurupá	5 people, 3 nights	320	IFS
Hotel + Meals Macapá	3 people, 2 nights	240	EU
Taxis	São Paulo, Brasília, Macapá	148	EU
Total Radio Workshop		9,612	
1st Broadcasting period (Jan-June 2009)			
Remmuneration community radio workers	2 assistants during 5 months	1,000	EU
Telephone	Skype credits + phone calls	300	EU
Total 1st Broadcasting period		1,300	
Dissemination (Jan-July 2010)			
Graphic design of manual for community radio + researchers		2,000	IFS
Printed copies of manual + mail	200 copies	890	IFS
Total Dissemination		2,890	
Personnel			
Primary Researcher (Mônica M Barroso Keel)	Salary (USD1526/month, 2 years) Covered by CIFOR (USD1000/month, 2 years)	36,624	RA+CIFOR+EU
Supervision (Patricia Shanley, CIFOR)		24,000	CIFOR (in kind)
Total Personnel		60,624	
TOTAL BUDGET OF THE PROJECT		82,577	
FUNDING PARTNERS			
Rainforest Alliance (Kleinhans Fellowship 2007-2009)		30,000	
CIFOR (in-kind contribution)		24,000	
CIFOR (financial contribution)		7,000	
EU Project (Bridging the Divide: Enhancing Forest Tenure, Management and Marketing in the Brazilian Amazon)		10,000	
IFS (International Foundation for Science)		11,580	
TOTAL FUNDING		82,580	

Final Word

“Radio communication, among all communication tools, is still the most important one in Amazonia because of the region’s oral tradition and because it disseminates information easily, quickly, and cheaply. The forest dweller takes his radio to the rubber fields, to the river and listens to the news, fact that no other means of communication has achieved so far. Acknowledging its imperfections and limitations, the radio is undoubtedly the tool through which a large portion of Amazonian traditional populations participate, mobilize, receive and send information, entertain and is entertained, escaping the isolation to which they have been subject to for decades.” (Barroso 2006, PhD Thesis)

This project was an opportunity to deepen my reflection on the relationship between the radio and rural livelihoods in Brazilian Amazonia started during my PhD. It was a happy coincidence to go back to Gurupá, meet old colleagues and interact with the forest and its people.

The end of this cycle does not mean the end of the dream of strengthening even more the role of the radio in supporting the lives of forest peoples. Since the end of my PhD, some reflections remain the same, such as the underutilization of the radio for the dissemination of local knowledge and information that is supportive to forest-based economies. Yet, despite the many challenges, the radio will not be replaced in its relevance in the near future in complex forest environments such as Amazonia. What might happen is a kind of multi-media, a technological convergence, where information will potentially circulate through an information network, the role of radio being the dissemination of this information for the isolated, the illiterate, thus democratizing information as it does today. In this sense, I will continue to pursue ways of potentializing the radio as an effective development tool for forest peoples. Non-timber forest products are one of the most emblematic symbols of the so-called ‘New Economy’, and their guardians must be included in the market rationale as active players rather than passive collectors.

This research project was only possible thanks to a truly collective work. First and foremost, I thank Patricia Shanley for her support, example and enthusiasm. Also, I thank Erin Sills and Simone Bauch for their valuable methodological and institutional support. Not to mention Bira, Rosa and other members of Gurupá’s social movement (87,9 FM community radio, Casa Familiar Rural, Prefeitura Municipal de Gurupá, FASE Gurupá, Instituto Gurupá, Sindicato dos Trabalhadores Rurais de Gurupá), as well as all community members who have happily participated in the different stages of the project. Thanks also to Mara Régia di Perna and her colleagues from Rádio Nacional da Amazônia/EBC and Rádio Difusora de Macapá, in particular Gustavo Netto, Andhrea Tavares and Celso Rabelo. They have been excellent companions during the radio workshop.

Also, this project wouldn’t have been possible without the financial support from IFS (International Foundation for Science), CIFOR, the European Union through Imazon, and the Rainforest Alliance through the Kleinhans Fellowship. Here I would like to leave a special word to the Rainforest Alliance, in particular to Elysabeth Kleinhans, for believing in the potential of individuals dedicated to researching and reflecting on the economic potential of tropical forests. I also thank Deanna Newsom for her continuous support during the fellowship period. Many thanks for walking this road with me, for your flexibility during my two pregnancies and births of my two daughters - Anita and Lisa, now 3 and 1.5 years old. They were part of this story, accompanying me in different stages of the project. Also, I am grateful for your understanding at this difficult final stage, when the funds were no longer sufficient to conclude the final part of the fieldwork, leading me to frustration but also to consciousness of the achievements along the research process. Nevertheless, I believe that the project has achieved a great part of its objectives, the Manual being a seed that I expect to disseminate as widely as possible. Finally, all my gratitude to my husband Pascal, for his love and encouragement.

Appendix I: Baseline Study Interview Guides

Linking Market Intelligence and Remote Villagers

Community Questionnaire - Baseline Study Gurupá (March-April 2008)

Target interviewees: Leadership of communities participating in the baseline study (preferably one woman and one man from each community, as well as information based on informal conversations and direct observation that may answer or confirm/triangulate the answers)

Interviewer: _____

Date: ____/____/____

Place of interview (name of community, river, where in the community):

Questionnaire number: _____

I. List of presence / role in the community

II. Information about the community

1. Land tenure situation:

() Extractive Reserve _____

() Sustainable Development Reserve _____

() Agro-extractivist Settlement _____

() Not legalized

() Other _____

2. What is the current size of the community? _____ families

3. In the past 5 years, how many new families³ moved to the community? _____

4. In the past 5 years, how many families left the community? _____

5. Is there a functioning school in the community (with at least 1 teacher)?

() No () Yes. Up to what grade? _____

6. How many active churches/religious groups are there in the community?

() Catholic

() Evangelic

³ New families include people from other communities who moved in because they married someone from the community, whole families who came from other places, families originally from the community who left and came back in the last 5 years.

() Other. Describe: _____

7. Are there health professionals in the community?

() Health agent

() Community health agent (ACS)

() Nurse / nursery technician

() Medical doctor

() Other

() None, or ACS only. What is the distance (specify means of transport) to the nearest health assistance? _____ hours

8. What are the active groups in the community (with at least one meeting held in the past 6 months)?

() Health commission

() Production club

() Women's group

() Mothers' club

() Youth group

() Football club

() Other. Describe: _____

9. Is there any association or cooperative in the community?

() No () Yes. Which one? What is the number of members? How much is the membership fee?

10. Is the community part of any inter-community association/network?

() No () Yes. Which one? _____

11. How many people/families from the community are members of the organizations below:

() COOMAG (Gurupá's cooperative) : _____

() Gurupá Rural Workers Union: _____

() Other cooperatives/organizations based outside the community (specify):

12. Is there one specific day of the week agreed for collective work (maintenance and construction of community spaces/infra-structure)?

() No

() Yes. How does it work (which days, how often etc.)?

13. Does the community organize any festivity?

() No () Yes. When? _____

14. What are the community's main sources of income?

() Salaries. Specify source(s): _____

() Social benefits (pension, family allowance *Bolsa Família*, unemployment allowance, other).

Describe: _____

() Agriculture. Main products:

() Animal Husbandry. Type:

() Fisheries (fish and prawns)

() Timber

() *Açaí*

() Palm heart

() Other forest-based products. Which ones?

15. Does the community have a forest management plan (approved by IBAMA)?

() No

() Yes. When was it approved? _____.

How much was harvested and sold in the last season? _____

16. Does the community have any community agreement on the extraction of timber and non-timber forest products hunting, fisheries?

() No

() Yes. Describe:

Is it respected?

() Yes, by everyone all the time

() Yes, by the majority

() Sometimes, by some people. Explain: _____

() No, it hasn't changed the community's practices. Explain:

17. During which periods of the year the community extracts forest products?

() All year long

() Only some periods. Explain: _____

III. Communication and Transport in the Community

18. Is the community part of FASE's two-way radio network?

() Yes () No

19. If yes, how many times did the radio break in the past 12 months (1 year)? _____

And how long did it take to get repaired? _____ OR

During how many weeks/months was the radio not working? _____ months/weeks

20. Which radio stations reach the community?

() Community Radio Gurupá () Rádio Difusora de Macapá () Other. Which ones?

21. Do they always work?

Radio station	Dec-May (winter/rainy)	June-Nov (summer/dry)
Community Radio of Gurupá		
Rádio Difusora de Macapá		
Others:		

22. Does the community have access to any other type of two-way radio?

() Yes. Describe: _____

() No

23. Is there a public telephone in the community? () Yes () No
24. If yes, since when? _____
How many times did it break in the past 12 months (1 year)? _____
How long did it take to get repaired? _____ OR
During how many weeks/months was the telephone not working?
_____months/weeks
25. How many households have functioning televisions (with antenna) in the community? _____
26. Do cell phones work in the community?
() No () Yes. How many people have functioning cell phones in the community?

27. Does anyone have a cell phone antenna? () Yes () No
28. How many boats are there in the community? _____
Is any of them owned collectively by the community (community association, producers' group, women's group etc.)? _____
29. About regular boats that stop at or nearby the community:

Itineraries	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Ticket price (R\$)							
Ticket price (R\$)							
Ticket price (R\$)							
Ticket price (R\$)							

30. Are there other boats accessible for transport of people and/or goods (middlemen, Rural Workers' Union, FASE, local government, Church etc.)?

31. How often do middlemen come to the community?

Name of middlemen	Frequency of visits	Are there season variations?

32. How often does the community receive visits from:

- () Church: _____times/ _____(week, month, year)
() FASE: _____times/ _____(week, month, year)
() Other NGOs: _____times/ _____(week, month, year).
Specify: _____
() Local government: _____times/ _____(week, month, year)
() Rural Workers Union: _____times/ _____(week, month, year)
() Others: _____times/ _____(week, month, year)

33. What were the main courses/workshops/meetings offered to community members in the past 12 months (1 year)?

Theme	Who organized

34. Do you think that the community is well informed about the prices of the local produce?

() Yes () No

Why? _____

35. Have you ever listened to the product prices that the community radio has been transmitting on the Rural Workers Union programme, every Saturday morning?

() Yes. When was the last time? _____

() No. Why? _____

36. If yes, were the prices what you expected?

() Yes () No

Why? _____

37. Do you think that the people in the community listen to the prices?

() Yes () No

Why? _____

38. Do you consider important to listen to the prices of the same products every week?

() Yes () No

Why? _____

39. Forest product prices from which places are the most important for this community (allocate numbers in order of importance)?

() Gurupá

() Santana

() Breves

() Belém

() Other places? Which ones? _____

40. Listening to product prices on the radio help you negotiate prices and payment conditions?

() Yes () No

Why? _____

41. In addition to prices, what type of information could be important and useful to hear on the radio?

Linking Market Intelligence and Remote Villagers

Household Questionnaire - Baseline Study Gurupá (March-April 2008)

Target interviewees: Small holders from selected communities in Gurupá (State of Pará, Brazilian Amazonia)

Interviewer: _____

Date: ____/____/____

Place of interview (name of community, river, where in the community): _____

Questionnaire number: _____

I. Identification

1. Full name: _____

2. Nickname: _____

3. Do you wish anonymity (no mention to your name in documents and other products related to this research project)? ☐ Yes ☐ No

4. Gender: ☐ Male ☐ Female

5. Age: _____ years

6. Residential basis (community, river): _____

7. Land tenure situation of the community:

☐ Extractive Reserve _____

☐ Sustainable Development Reserve _____

☐ Agro-extractivist Settlement _____

☐ Not legalized

☐ Other _____

8. For how long have you been living in this community? _____ years

9. And before? ☐ same community ☐ city ☐ other community _____

10. Complete the table below:

Do you have children? How many?	
How many are over 15 years old?	
How many live in the community?	
How many live in Gurupá?	
How many live in Santana?	
How many live in other places (specify)?	

11. Are you (or someone in your family) member of any association of cooperative?

☐ No ☐ Yes. Specify: _____

12. Other affiliations and respective roles:

Organization	Who is member	Role/Position
--------------	---------------	---------------

Rural Workers Union of Gurupá		
Church		

13. How many times/year do you (or someone in your family) travel to Gurupá? _____
And to Santana? _____

II. Production, Consumption and Trade of Forest Products

14. Of the list below, which items represented sources of income (in cash) for your family last year? Of these, which were the 3 most important ones (in order of importance)?

() Salaries. Specify source(s): _____

() Social benefits (pension, family allowance *Bolsa Família*, unemployment allowance, other).

Describe: _____

() Agriculture. Main products: _____

() Animal Husbandry. Type: _____

() Fisheries (fish and prawns)

() Timber

() *Açaí*

() Palm heart

() Other forest-based products. Which ones? _____

15. Complete the table below:

Forest products commercialized by your family	Volume of sales in 2007 (specify unit)	Average price/unit obtained in 2007	How is the product sold (<i>in natura</i> , as oil, cooked etc.)	Who process the products?	Harvest period (e.g.: May-Oct)
Açaí					
Andiroba					
Palmito					
Camarão					
Madeira					

16. Do you practice sustainable management of timber and non-timber forest products? **(RECORD FROM THIS POINT)**

() Yes. How does it work? How did you learn the management technique? Is the management plan approved and legalized by IBAMA?

() No. Why? _____

17. Last year, the majority of your produce was sold to middlemen or directly in town?

() Middlemen:

- a. Where do you deliver your product?_____
- b. Do you always sell to the same middlemen? () Yes () No
- c. Why? _____
- d. Do you usually get paid () in cash () in kind
- e. If you get paid in cash: () a vista ou () em consignação () a prazo
- f. If you get paid in kind, what type of good do you usually receive?_____

() In town:

- g. Where do you sell your produce?_____
- h. To whom?_____
- i. Why?_____
- j. Do you usually get paid () in cash () in kind
- k. If you get paid in cash: () a vista ou () em consignação () a prazo
- l. If you get paid in kind, what type of good do you usually receive?_____

18. Do you negotiate the prices of your products?

() Yes. How?_____

() No. Why?_____

19. What is the negotiation process?

() the buyer sets the price () you set the price () the buyer gives the price and you negotiate () you give the price and the buyer negotiates

20. In the past 5 years, did your relationship with the middlemen improve?

() Yes () No

Why? _____

21. Do you think you sell your produce for fair prices?

() Yes () No

Why? _____

22. Do you know where your products go to (final destination)?

() Yes. Where to? _____

() No

23. Which forest products did your family use last year, and for which purposes?

Product	Uses
Açaí	() food () trade () medicine () construction () other _____
Palmito (palm heart)	() food () trade () medicine () construction () other _____
Andiroba	() food () trade () medicine

	() construction () other _____
Shrimp	() food () trade () medicine () construction () other _____
Timber (specify)	() food () trade () medicine () construction () other _____
Buriti	() food () trade () medicine () construction () other _____
	() food () trade () medicine () construction () other _____
	() food () trade () medicine () construction () other _____
	() food () trade () medicine () construction () other _____

24. Do you intend to change anything in your production process in the next few months/year?

() Yes. What (equipment purchase, credit, forest management plan)?

() No

III. Access to Information

25. Do you know the prices of the following products (last week)?

Product (unit)	Gurupá	Santana	Breves
Açaí (tin)	R\$	R\$	R\$
	R\$	R\$	R\$

26. How did you get those prices?

27. Do you have radio at home? () Yes () No

28. What are the main sources of information about prices and trade opportunities for your products?

- () Radio. Which station? _____
 () Two-way radio
 () Public telephone
 () Cell phone
 () Middlemen who pass by the community
 () Neighbours or relatives who go to town
 () Others _____

29. What are your main sources of technical information about production, management and processing of forest products?

- () Radio. Which station? _____
 () Two-way radio
 () Public telephone
 () Cell phone
 () Middlemen who pass by the community
 () Neighbours or relatives who go to town
 () Workshops. Organized by whom? (e.g. FASE, Rural Workers Union, Local government etc.)? _____

30. What is the most popular radio station in your household?

Favorite programmes			
Time of programmes			
Who listens to each programme?			
Why?			
Do any of them transmit product prices? For which products?			

31. Does any information you hear on the radio help in the production and trade of forest products?

- () No
 () Yes. Explain: _____

32. What type of information about production and trade would be interesting for you to hear on the radio?

33. For the communities with access to Gurupá's community radio only:

- Do you listen to the Rural Workers Union radio programme every Saturday morning?
 () Yes () No
- Have you ever listened to the prices of forest products? () Yes () No
- If yes, how many times? _____
- Is it useful for you?
 () Yes. In which ways? _____
 () No. Why? _____

Interviewer's observations:

Appendix II: Radio Workshop Materials

RADIO WORKSHOP AGENDA:

**OFICINA DE COMUNICAÇÃO POPULAR
'CONECTANDO COMUNIDADES E MERCADOS'
GURUPÁ, DE 14 A 16 DE NOVEMBRO DE 2008**

Carga Horária:

24 horas em aulas presenciais

Objetivo:

Elaboração de Programas de Rádio sobre Usos e Comercialização de Produtos Florestais e inserção deste novo componente na grade de programação da Rádio Educadora 87,9 FM de Gurupá.

Local:

Casa de Cultura de Gurupá

Programação:

1º dia - 14/11/08

MANHÃ (ABERTO AO PÚBLICO EM GERAL)

8h	Boas Vindas, agradecimentos e abertura do evento
8h30	Apresentação da equipe
9h	Apresentação do projeto 'Conectando Comunidades e Mercados', por Mônica Barroso
10h	Fala de representante do CIFOR/IMAZON sobre o Consórcio Comunidades e Florestas
11-12h	O Modelo da comunicação no Brasil, a Lei 9612 /98, Educação ambiental nas ondas do rádio (boas práticas), por Mara Régia Di Perna

TARDE (APENAS PARA OS INSCRITOS)

14h	Socialização do grupo Elaboração das regras de boa convivência Apresentação dos objetivos da Oficina e do cronograma de trabalho
14h30	Observações do grupo em relação ao Programa
15h00	Intervalo para o cafezinho
15h15	Brevíssima história do Rádio
15h30	Análise da qualidade da programação das rádios locais com ênfase na grade de programas da Rádio Educadora 87,9 FM de Gurupá.
16h	Análise crítica Identificação dos formatos radiofônicos mais comuns Diferenças entre rádios comerciais, educativas, públicas, livres e comunitárias
17h	Estudo da linguagem, formatos e análise dos temperos que podemos usar para potencializar o veículo na promoção da pauta da economia florestal
17h45	Avaliação do dia

NOITE (ABERTO AO PÚBLICO EM GERAL)

19h30	Exibição do vídeo 'Uma onda no ar' na Casa de Cultura de Gurupá
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2º dia - 15/11/08

MANHÃ (APENAS PARA OS INSCRITOS)

8h	Acorda corpo
8h30	Dinâmica de sons Oficina de Voz: técnicas vocais e de interpretação de texto
10h	Intervalo
10h30	Sonoplastia - os tons e as cores do rádio (usando os roteiros/livro Frutíferas como matéria-prima) Criação e roteirização de pequenos esquetes/ radiodramas, vinhetas etc

11h	Divisão da turma em grupos para a finalização da atividade
12h	Almoço
TARDE (APENAS PARA OS INSCRITOS)	
14h	Técnicas de Radiojornalismo: a notícia, a pauta, apuração, a fonte, a redação da notícia Oficina de texto: o bê-a-bá da produção de textos - os Qs do radiojornalismo; Exercício prático
15h	Noções básicas de entrevista. Dramatização de situações e tipos de repórteres Exercício prático de criação, produção, roteirização e pauta Formação de grupos de trabalho com base no talento e no perfil d@s participantes Audição do que foi produzido
16h	Intervalo
16h15	As várias funções de uma equipe de rádio Identificar preferências - Simulação
17h	Botando a mão na massa Análise dos problemas mais comuns às rádios comunitárias Case: Rádio Educadora 87,9 FM de Gurupá / Debate sobre uma melhor adequação da grade de programação da rádio ao seu público-alvo e comunidades afins, e sobre como inserir um componente de mercado dentro da programação
17h30	Avaliação coletiva do dia
NOITE (ABERTO AO PÚBLICO EM GERAL)	
19h30	Exibição do vídeo 'Alô Alô Amazônia' na Casa de Cultura de Gurupá
3º dia - 16/11/08 (DIA TODO APENAS PARA OS INSCRITOS)	
MANHÃ	
8h30	Socialização do grupo
9h	Trabalho de pesquisa junto aos participantes da oficina com o objetivo de "garimpar" dados que possam melhor orientar as produções radiofônicas do dia;
9h30	Navegando nas ondas do rádio: divisão da turma em grupos para exercício prático
10h	Intervalo para o cafezinho
10h15	Criação de um programa em quaisquer dos formatos estudados, a partir de dados colhidos com moradores do Rio Uruaí e adjacências (ou de Gurupá)
12h	Almoço
TARDE	
14h	Produção, gravação e edição de vinhetas, campanhas e programas criados
15h	Apresentação da experiência a todo o grupo
16h	Avaliação final do trabalho e da oficina através de questionário e rodada de opiniões
16h30	(APENAS PARA EQUIPE SELECIONADA PARA DAR ANDAMENTO AO TRABALHO) Mesa redonda para análise das estratégias de comunicação da Rádio Educadora 87,9 FM de Gurupá
	Desdobramentos a serem desenvolvidos a partir da oficina (formação da equipe responsável pela produção dos programas, com distribuição de tarefas e responsabilidades até julho/2009)
18h	Encerramento
NOITE	
19h30	Jantar de encerramento e despedidas

Appendix III: The Radio Workshop in Images

