THE COLLECTION AND USE OF NON TIMBER FOREST PRODUCTS

A CASE STUDY FROM GUMBANG, SARAWAK

WRITTEN BY: RIKKE HOLM, RUC
BIRGITTE ODGAARD, KU

AUTUMN 1998
Table of contents

1. Introduction  
   page 1

2. Project design  
   page 3

3. Discussion of results  
   page 7

4. Discussion of methods  
   page 16

5. Conclusion  
   page 23

Appendix 1-6

Literature
Abstract:

This project purposes an analysis of the collection and use of NTFP’s. The analysis looks at the changes in livelihood practices within the last decade in relation to how better access to a market can influence. The analysis is based on a case study conducted during our fieldtrip in Sarawak and takes place in the village Gumbang.
We have carried out different methods to make this analysis and are discussing their use and relevance for our analysis.

1. Introduction

Many rural people in the third world are using NTFP’s\(^1\) (non timber forest products) on a daily basis. It is an integrated and important part of their livelihood strategies, especially for food security. In terms of food security NTFP’s serve a lot of functions. The products are a supplement to farm production; they provide fuel for cooking, cash income and a buffer, an insurance, against drought and crop failure. This means that the functions of the NTFP’s are both indirectly and directly contributing to food security (FAO, 1991).

In Sarawak people that live close to the forest make use of NTFP’s. The rain forest has a great biodiversity and provides the people with food, medicine and tradable products. Only a very small part of the rural population, about 2500 Semang and 10000 Penan, depend mainly on NTFP’s. Many rural farmers are using NTFP’s as a food supplement source and as security for the households needs (Brookfield, 1995). Since this tells us that NTFP’s are of great importance to the rural people in Sarawak, we find it interesting and highly relevant to make a survey on what people are collecting from the forest today, what they are using it for and to see if there have been any changes over time.

Our survey is taking place in Kampong Gumbang were a road was build in 1996. This development, we are assuming, has lead to a change in the collection and use of NTFP’s. The change is built on an assumption that NTFP’s has to a larger extend become a product traded

\(^{1}\) Non timber forest product encompasses “all biological materials other than timber which are extracted from forests for human use. These include foods, medicines, spices, essential oils, resins, gums, latex’s, tannins, dyes, ornamental plants, wildlife (products and live animals), fuelwood and raw materials, notably rattan, bamboo, smallwood and fibres.” (De Beer & McDermott, 1996)
at the market. This we assume has influenced the livelihood practises. This leads us to our main objective and our sub-objectives.

**Main objective:**
We want to find out if there has been any changes in what people are collecting from the forest and what they are using it for in the last decade and how this has influenced livelihood practises.

**Sub-objectives:**
1. Find out which NTFP’s (plants, fruits and animals) people are collecting from the forest and why a change in products has taken place.
2. Find out whether people are using the NTFP’s in the household or selling them at the market and why changes in this behaviour has taken place.
3. Find out how much time and how often people are collecting/catching NTFP’s and why changes have happened.
4. Find out if it has become easier or more difficult to find the NTFP’s compared to ten years ago and why there has been a change in accessibility to the products.
5. Find out how often people go to sell their products and why there has been changes in that behaviour.
6. Find out which role the NTFP’s play in the household economy and why this has changed.

**Limitations:**
We are not approaching the analysis in a natural scientific way.
We are not making an economic analysis of NTFP.

**Report outline:**
A lot of changes happened to our project design during our field trip. Therefore we will present both what were our first ideas of the project and what we ended up doing. This we have outlined in chapter two. In chapter three we will go through our results and make a discussion on the results. A discussion on methods used during our field trip will follow in chapter four. The last chapter, five, will be a conclusion on the whole report.
2 Project design

In this chapter we explain and discuss our assumptions in accordance to the methods and project design. The idea is to give an impression of what kind of assumptions we had to develop our project, our considerations and the problems we dealt with during the process. We have chosen to split the chapter in two main parts; ‘Before the fieldtrip’ and ‘During the fieldtrip’.

Before the fieldtrip:

Presentation of group members:
Our sub-group consisted of three people, one from Forestry (KVL), one from Human geography (KU) and one from International Development Studies/Geography (RUC). Our sub-group certainly lived up to one of the SLUSE-programme main purposes - interdisiplinarity. We had to deal with each other’s different backgrounds and our different experiences in approaching project-and groupwork. The group member from Forestry (KVL\(^2\)) had a more specific natural scientific knowledge about forestry compared to Rikke (RUC) and Birgitte (KU) who usually work with more general social scientific approaches to problems dealing with ‘Development and Environment’.

Preparation of the project
An important challenge was to “understand each others different language”. Inspired by the group member from forestry we decided to work with NTFP’s. One of our first meetings was a discussion of what defines ‘a forest’. Rikke and Birgitte dealt with a forest as a forest with trees while the last group member was more concerned with naming trees, soil conditions, age, bio-diversity etc. Her idea was to make a project with emphasis on certain NTFP’s and their growing conditions.

Birgitte and Rikke were more interested in marketing conditions and the interaction between

\(^2\) She did quit the SLUSE-programme before our departure to Malaysia
use of NTFP and access to a market. We discussed how to combine the two groups of interests in the project design by trying to specify the NTFP’s we wanted to deal with in our project. We did not succeed, because neither the background material we were given about the Sarawak upper catchment nor our limited pre-knowledge of Borneo could tell us of what kind of NTFP we could expect to find exactly in the Bau-area/district.

The fact that the suggested project design by our group member from KVL did require insight in growing conditions and some pre-knowledge about types of NTFP in Bau-area, and that the project design was not formulated or further developed by our last group member, led to Rikke and Birgitte’s socio-economic orientations influenced the final formulation of the project.

The idea of a comparative study:

Our original idea was to study two villages placed at different distances to a market, one close to a market and one further away. We wanted to signify the degree to which the NTFP’s were used in the household or sold at the market and we expected to put emphasis on access to transport.

Our main objective was to find the differences between the two villages in their use of NTFP’s for domestic purposes and for sale at the market, and why. Our main hypothesis were: 1) The village close to the market would mainly collect NTFP’s for selling at the market, while the village further away would mainly collect for their own household. 2) People from the village far away from the market would not go so often to the market as people from the village close to the market. 3) The village closer to the market would have better access to transport than the other village because the infrastructure would be better than in the other village.

We discussed whether it would be possible to include a discussion of the ecological sustainability of the way the two villages were using the forest, but according to the limited duration of the fieldtrip and the overall problem of estimating sustainability we decided not to include it in our project.

It was our plan to interview ten people in each village about the most important NTFP, find

---

3 we got a handout with the title Urban Development and the Water by Mutedza Mohamed & James Dawos Mamit.
out if they collected for the household or for sale at the market, to what extent it played a role for the household economy, which role the access to transport played for going to the market and to get an impression whether people saw NTFP's as market products that could give access to other products like material goods. We wanted to follow the NTFP's from collection during storage and during transportation to the market or to the household.

Constraints

It was a problem that we only had 30 pages of background material from UNIMAS⁴, describing the upper catchment of Sarawak River. It was not possible to decide how much of the information was relevant Bau-district and that made it difficult to develop the original project idea in the preparation period. Originally it was part of the SLUSE-programme plan that the idea of project designs should be discussed with Malaysian students from UNIMAS via e-mail. Unfortunately this did not succeed for any subgroup in the team because the Malaysian students were on vacation until few days before our arrival in Malaysia. Otherwise they could have provided us with background material about Bau-area and have given feedback on project designs.

About two weeks before we were leaving for Malaysia, our group member from KVL decided to drop out of the SLUSE-programme. Thereafter the natural scientific approach that could have influenced the project was gone and the project became even more focused on socio-economic issues, as we were less equipped to discuss natural scientific matters and did not have the interest.

During the fieldtrip:

Changing project design:

During the first meeting at UNIMAS we realised that the Malaysian staff had located two remote villages, Gumbang and Padang Pan, where it was possible to do our work. We chose Gumbang, because it was first thought that Gumbang was the most remote village, but it turned out that there was a new road that provided easy access to the local market in Bau. We expected that the village we were staying in, Opar, could be the second village. The

⁴"UNIMAS" is the university in Kuching, which coorporate with the SLUSE-programme
village had had a road for at least 10 years and the majority of the inhabitants were either working in Bau or in SALCRA (Sarawak Land Consolidation and Rehabilitation Authority). According to the local headman⁵ of the village there were no collectors. Therefore we decided not to use Opar in our project, because we believed that it was not relevant. We went to the local market in Bau and asked the stall keepers where they came from. Nobody came from Padang Pan, but 4-5 people came from another village, Doyoh. That was how Doyoh became our second village.

The focus was then turned on Gumbang and Doyoh for a comparative study. We arranged via the local headmen to have a group interview with the collectors in both villages. In Gumbang only 2 of the announced 4-5 collectors showed up and in Doyoh it turned out that people for some reason were unwilling or unable to talk to us. Because of the limited time we did not try to find out why people in Doyoh did not show up. Instead we decided to rethink our objective and focus solely on Gumbang, rather than conducting a comparative study between two villages.

Our new main objective then became to find out what people in Gumbang are collecting and what they are using the products for. Further we want to look at the changes within the last decade.⁶

We also changed our focus on a target group, because we realised that the villagers did not understand the concept of “collector” the same way as we did. We expected to meet a group of villagers, who would define themselves as ‘collectors’ according to time and energy spent on collecting NTFP’s compared to other activities. But the villagers defined themselves according to other occupations and we changed our focus to village peoples relation to NTFP in Gumbang.

We had an intensive working process collecting material, finding informants, making appointments with informants, making interviews and development of questionnaires. (see appendix 1)

⁵ A headman is like a major of the village and in Sarawak all villages have a headman.
3 Discussion of results

In this chapter we are going to present the findings to our sub-objectives. Underneath every sub-objective we are making a discussion of the results, and finally we will make a general discussion on the results. The results are built on 14 semi-structured interviews and topic-focused interviews. Our results are a bit weak and to a degree confusing. This is due to some inconsistent answers that we have not been good enough to follow up upon. Not all of our informants have answered all the questions.

1. Find out which NTFP’s (plants, fruits, and wild animals) people are collecting from the forest and why a change in products has taken place.

We found that many different NTFP’s are being collected. These products are:

- **Plants:** bamboo, fern, tapioca leaves, jerring, tepus and rattan.
- **Fruits:** durian, sebutrees, lansat, petai and rhambut-an.
- **Animals:** river frogs, foxes, wild bore, fish, deer and turtles.

From the 14 interviews, 13 villagers answered that they are collecting the products themselves. One person does not collect products at all because his ‘pagan’ beliefs forbid it. Of these 13, one person made an exception, when he is to busy on his fields, by buying the products instead. Two other villagers also collect some products, but are buying the products most of the time because their husbands are working in town and bring products home.

During the last ten years there appears to have been no changes in which types of fruits and vegetables the villagers are collecting as eight villagers answered that they were collecting the same products ten years ago. Their explanation is that these products are still available in the area. We are not quite sure if we can rely on this answer because their answer was, “the same as now”. We did not get them to specify the products. We will see later in the fourth sub-objective a conflict in that some of the villagers say that it has become more difficult and some say easier to find the NTFP’s and still they are collecting the same products.

Looking at the animal products, we had five villagers answering that they cannot catch as

---

6 Pagan is one of the traditional religions in Sarawak. They are animists which means that they believe that natural objects, natural phenomena, and the universe itself poses souls (Webster’s Encyclopaedic Unabridged Dictionary, 1994).
many animals as they could before. They say bigger animals like deer, wild bore and foxes are especially hard to find. There are different reasons to why there has been a decrease, which we will discuss under sub-objective four.

We wanted to find out which products are being collected for two reasons. Firstly because we knew nothing about which products were being collected in this area, and secondly, it was important for the rest of the interviews to establish from the beginning which NTFP’s we were talking about. Thirdly we thought that this was a good soft starting point in an interview situation, as it was easy for the villagers to answer.

2 Find out whether people are using the NTFP’s in the household or selling them at the market and why changes in this behaviour has taken place.

We found that 13 of the villagers collect mainly for the household. Selling at the market in Bau or Kuching only takes place if they have collected more than they can use. There is a difference within the products sold at the market because more villagers are selling fruits at the market compared to how many are selling animals. We found that nine of our informants are often selling fruits in the fruit season. Only four informants are selling animals at the market and one is selling to the teacher at the local school. Finally, looking at plants, five of the villagers are selling at the market if they have collected more than they can use. But for all of them the most important thing is collection for the household.

Ten years ago the purpose of collecting was for the household and we think that this was maybe even to a greater extend, because they seldom went to the market. There were only three villagers who said that they were selling at the market ten years ago. It was difficult to get to the market because they had to walk for three hours to get to the nearest transportation to either Bau or Kuching. Today there is a van running three times a day.

We were expecting that not many went to the market earlier, but it was surprising to us that the market only plays a role to the extend that the villagers only sell if they have more than they can use in the household. We thought that the market played a bigger role.
3 Find out how much time and how often people are collecting/catching forest products and why changes have happened.

The time villagers are spending on collecting or catching animals varies a great deal. One villager answered that he spends 10hrs/day on catching the animals and 4hrs/day collecting plants and fruits. Three villagers answered that they are spending 7-9hrs/day collecting in total. Another villager is answering 1hr/week. Further, five villagers were answering that they are collecting on the way to and back from their fields. We did not get any answers on the last four villagers.

When asked about ten years ago, one villager answered that he spent the whole night catching animals and he spent the whole day collecting fruits and plants. Nine villagers answered that they were spending the same amount of time then as now.

The answers to how often the collect varies as well. For plant collection two villagers answered everyday, two answered 2-4 times per week, one answered once a week, and finally one answered once a month. For fruit collection it was almost the same picture except that fruits are only collected in fruit season. Two answered everyday, one answered once a week, one answered 2-3 times per week and finally one answered once a month. For animal hunting, one answered everyday, two answered once a week and finally, one answered as often as possible.

When asked about ten years ago, two villagers say that they were spending the whole night in the forest. One answered 1hr/week and the rest we do not have answers for. Due to these variation in time spent and the frequency of collection we can not conclude a general trend. But we think that the reason for the different answers is that villagers are not putting aside a certain time a day for collecting. Instead, collection is something that is going on sporadically when they have the time, when they need something from the forest, or when they are passing by a product that they can use.

We thought that there had been a change in how much time and how often villagers are collecting during the last decade. But due to the lack of frequency information for practises ten years ago we can not make any conclusions. Regarding time spent on collecting, we can
say that there has been no change according to the villagers.

4 Find out if it has become easier or more difficult to find the NTFP’s compared to ten years ago and why there has been a change in the accessibility to the products.

One person was answering that is has become more difficult to collect plant products due to an increase in the population in the village. Another says that it has become more difficult to find bamboo due to an increase in the villager population, and that fewer villagers have ‘tabu’s’. One villager says that there is no difference in finding the bamboo. Another answered that it is easier for him to find bamboo because more villagers are too busy working on their fields to spend time going into the deep jungle where there is a good supply. One villager answered that it in general is more difficult now because no one was collecting for the market ten years ago. Another tells us that there has been a general decrease in forest products because the ceremonies and praying for the forest has ceased.

In regard to getting animals one villager says that it is harder to find frogs because more villagers collect them. Four villagers say that in general there are more villagers hunting now because more villagers have guns now compared to ten years ago (34 villagers have a permission to carry a gun says the headman). This means that the villagers can hunt more effectively compared to handmade weapons and traps. One villager also added that the baby animals were being killed and therefore it has become more difficult for the natural populations to exist. According to two of the informants the destruction of animal habitat by logging activities in the area has resulted in some animals fleeing. One villager person told us that there is a problem with the Indonesians crossing the border to take the eggs from the birdnests.

It is hard to find a general trend to this question there almost as many opinions as there is informants. As for animal hunting, eight of the informants have answered that it has become more difficult due to different things. Therefore we think that there has been a general decrease in the amount of animals.

We have our doubts about the explanation that there has been an increase in the villagers and

---

7 Tabu is when you mark a certain area to regeneration, which means that if you have hunted in one place then you can not hunt there for a while after, it is a form of natural resource management.
that this has caused a difficulty in finding NTFP’s. We were told that there were 580 people in
the village now and according to a count of the people in 1992 this was the same amount.\textsuperscript{8}
This indicates that there has not been an increase in the population of Gumbang.
We think that it was a little bit difficult for villagers to answer this question, because some of
them would start of by saying that it has become easier and later on they would say that it has
become more difficult. One reason could be that no major change has happened in ten years.
We are asking the question as if there has been a change, and are not suggesting that there
have been no changes, maybe the informants have felt that they have to say that accessibility
is either easier or more difficult.

5 Find out how often people go to sell their products and why there have been changes
in that behaviour.

The frequency with which the villagers go to the market to sell their NTFP’s and cultivated
products varies. We found that there are four villagers going to sell once a week, while one
informant answered that they were going twice a week in the fruit season from December to
January. Two of the villagers say that they are only selling pepper, rubber and cocoa from the
farming scheme only go 3 times a year to sell their products at the agricultural department.
We do not have any results from the last five that are selling to the market according to sub-
objective one.

Ten years ago three villagers sold nothing at the market. One person went once every 2-3
month. One person went 2 times a week in seasons. One person went 2 times a month. One
person was also going to the market once a week but it was more difficult as she had to carry
her products leaving Gumbang at 3o'clock in the morning and walking to the neighbour
village from where she could get transport.

This means that the villagers we interviewed in Gumbang are going to the market more
frequently now compared to ten years ago. There is a tendency that there has been a change
from maybe a few times a year to more than once a month. The answer to this development
seems to lie in the fact that it has become easier to get to the market. Now villagers can use

\textsuperscript{8} We got this information at the district office in Bau.
the local van and do not have to walk.

The villagers did not have difficulties in answering this question. It seemed like this question was very clear to the villagers. One of the reasons could be that going into town is such a big event that villagers remember very well. Another reason is that the change within the last ten years has been so marked that it is easy to remember that they did hardly go to the marked ten years ago.

We actually wanted to find out about the forest products specifically. But because they do not go to the market to sell forest products alone we had to ask in general for both the cultivated and the collected products. This is an indication that NTFP’s might only play a minor role in the household economy, which leads us to the final sub-objective.

6 Find out which role the NTFP’s play in the household economy and why this has changed.

To answer this sub-objective we have included a lot of questions, both the ones about the role of cultivated products, how much they earn on the forest products, which other jobs and incomes the villagers have and then why they are collecting forest products.

The villagers we were interviewing all consider their main occupation as farmers except from the two whose husbands are working in town, they consider themselves as housewives. This shows us that collection of NTFP’s is not considered as an occupation in itself.

Twelve of our informants are growing rice, rubber, pepper, cocoa, ginger, yam, cucumber, corn and other different vegetables. It is the same with these products as with NFTP’s that they are only selling the surplus. One person sells his surplus in the village and eight villagers are selling the surplus at the market. Only the products like rubber, cocoa and pepper that are a part of a government scheme are cultivated mainly for the market. Looking at the time the villagers spend, they all spend almost 6 days a week on their fields except in growing season.

Ten years ago it was mainly the same products being cultivated. But ten years ago they did not go to the market to sell, only 3 villagers were selling if they had a surplus and they answered that is was a lot harder to get to the market.

How much money the villagers earn on their forest products was hard to find out. Only two villagers were capable of distinguishing between the forest products and the cultivated products. One of them is making about 30-40 Rm per trip on forest products while she gets 30
Rm per trip for the cultivated products. The other person told us that she is making about 20-30 Rm altogether per trip where 40% is on vegetables and 60% is on forest products. Three villagers only answered for both forest products and cultivated products and that is about 30-50 Rm per trip. Two are making a lot more money; they are making between 100 and 250 Rm per trip. Those two are the once that were caracterised as “collectors” in the beginning of our analysis.

Ten years ago the villagers seldom went to the market to sell, though one person answered that they would get 20-30 Rm for two baskets of durian. Another person answered that he was earning the same during a year now as he did ten years ago. He would take more per trip to the market in the past whereas today he can go more often and bring smaller amounts.

Three farmers have other jobs as well. They cut wood in the forest and brings it back to the villagers. The wood is used as building material for houses.

Ten years ago it was easier to find trees to be logged closer to the village. Nowadays the distance to good big trees is at least 2-3 hours walk. They have to walk all the way to the Indonesian border to find the big trees.

A further seven villagers have an extra income. They are getting money from their children or other family members living outside the village, which no one did ten years ago.

Finally the husbands of two of the informants who have work in the city had those jobs ten years ago so the families have always had their main income from these jobs in the city.

The reason why the villagers are collecting both ten years ago and now is, according to seven of our informants, that it is an important input in their livelihood strategies. Four of the informants even made the point that they would have nothing to eat if they could not go and collect.

NTFP’s are of minor economic importance for the villagers in Gumbang, both today and ten years ago. This does not mean that they can live without the forest because the forest products are important for survival as an extra input in the household. This was also the case ten years ago, but we think that maybe they were more dependent on the forest products then because a decade ago they did not have other income source as they have today.

We wanted to find the answer to this sub-objective because it gives us an impression of how important it is for these villagers to be able to have access to the forest as a resource. We
found that it was important for the villagers so that they could get food but as an economic income it only play a minor role.

Summing up:
We have interviewed 14 villagers, which is hard to make a statistical material on because we did not follow up on all the answers we got and we did not ask all the same questions to all the informants. This happened due to the change from using semi-structured interviews to using topic-focused interviews. In hindsight we realise that we should not have been satisfied with some of the answers when they actually tell us little, not an optimal result for the report. We have discussed which questions were easy for the informants to answer and which were difficult. We found that it was easy for the informants to answer questions that were very fact oriented about concrete things such as, what are they cultivating and what are they collecting, whether they sell the products on the market or use them in the household and how often they go to the market. But some of the questions concerning time were difficult for them. There are several reasons for that. One is that maybe we did not make our questions clear enough so that they did not quite know what we wanted to know. Another reason can be that they do not have the same feeling about time as we have. And maybe this time question was further made difficult because they are not putting a certain time aside for collection as mentioned above. Further there was problems with getting a clear answer whether there has been changes over time and maybe that is because there has not been any major changes over the last decade, except for the animal population and the improved access to the market.

We must ask ourselves if the villagers we interviewed are a fair representation of the village as a whole. In an interview with one of our key-informants, the teacher, he told us that about 20% of the villagers that have jobs in town and the rest are farmers (Out of these farmers 2-3% are cutting and bringing wood to the village and 0.8% are Pagan). Of our 14 interviewees we talked with 12 (85.7%) that were farmers, 2 (14.3%) where the men were working in town. Therefore we can say that the villagers we talk to did represent the village as a whole. Or said in other words we got to talk to the two different groups of villagers. Looking at “pagan” and villagers cutting wood we do not have a representative picture because we talked to 1(7.1%) pagan, which means that we were lucky to run into him and we talked to 3(21.4%) villagers cutting wood. The reason for talking with that many
cutting woods is that we specifically were looking for these villagers to interview to hear something about the situation with big trees in the area.

An increase in our sampling size would give a fairer representation, but we were limited by time.

But even though this looks like a good statistical sample there are a tricky part to it. As earlier mentioned we did not get all 14 informants to answer all our questions. This means that there is inconsistency in the answers and that is influencing the fact that we can not make good statistical results.
4 Discussion of methods

In this chapter we will discuss the methods we have been using and the results we achieved from our fieldwork. We describe our main purpose of using the methods, their relevance and the problems we faced.

Informal interviews with headmen:
Our aim was to obtain information about the village people and their behaviour in respect to the collection of NTFP’s in Gumbang, Doyoh and Opar.
The purpose of using informal interviews is to provide the interviewer with general information about a topic/several topics, in which the informant has an insight. The questions are asked in a way that encourages the informant to share his view, experience and information. The interviewer has a purpose in mind and controls the interview to serve this purpose, while keeping an informal atmosphere. (Casley&Kumar,1992).

We had prepared some topics we wanted to talk about (appendix 2). We were very satisfied with the informal interviews with the three headmen. They all provided us with general information about the villages, which was useful. We realised that we should put more emphasis on the role of our informant’s main occupation (and other jobs) in the questionnaire. Another point was that the results of informal interviews helped us deciding which villages to work in.
We assumed that the headmen understood what we meant when we asked for ‘collectors’ and that their response was reliable when they answered that nobody collected in Opar, 4 to 5 villagers collected in Gumbang and that Doyoh had 10 collectors. When we later on realised that the concept ‘collector’ was not understood as an occupation by the villagers, we had second thoughts whether we could have used Opar as our second village anyway.

Structured survey at the market:
Our aim was to get an idea of what kind of NTFP's were sold at the local market and to find out where the stall keepers came from. A structured interview is - unlike a qualitative interview -designed to generate quantitative data and it can not be changed during the cause
of the interview (Casley&Kumar, 1992). We used a formal questionnaire to ask each stall keeper at the local market in Bau to point out the NTFP’s and tell us from which village he/she came from, further we asked if the stall keeper had collected the NTFP’s her/himself. By using this quantitative method it was a simple and quick way of getting overall information. From the information we got, we assumed it was possible to choose Doyoh as our second village. It later turned out that we could not work in the village, because the villagers did not show up to the group interview.

**Focused group interview:**

The idea of interviewing a group was to get an insight in the village peoples experiences with collection of NTFP’s. The focused group interview is conducted with a small group (6 to 10 participants) and one of the features is that the participants discuss ideas, issues, insights and experiences among themselves. The interview is guided by the moderator/interviewer and it is up to the participants freely to comment, criticise or elaborate on the views expressed by the previous speakers (Casley&Kumar, 1992)

We had the impression that the relevant informants in Gumbang and in Doyoh were not used to an interview situation and the group interview could help eliminating the “nerves” before we interviewed the villagers one by one. (see appendix 3 for our prepared topics).

Unfortunately none of our planned focused group interviews succeeded, because the informants did not show up. In Gumbang we got two individual interviews instead. In Doyoh we were told that the informants did not come because of a combination of limited time and insecurity of what was going to happen at the meeting. We assumed that the headman, who had promised to call the collectors for the meeting, probably had an unclear picture of our project which meant that he could not explain to the collectors why they should come to the group meeting. It must be added that the headman in Doyoh was quite old and had difficulties in our conversation if his wife was not around. This experience taught us that our presentation of ourselves was very important. We should emphasise to our informants that, if they had any doubts about us and/or our work, they could ask us anything.

**Direct Observation**

In our original plan one of our aims was to follow the NTFP’s on their way from the forest to the household or to the market. We wanted to observe the process which could give us an
insight to the collection of NTFP’s. Participatory observations would require much more than a single trip into the forest. Further the observer must be able to take part in the social reality experienced by the villagers (while being observed). It is up to the observers to decide in advance, whether participatory observation means an active role, where the observer joins the activities, or if the observer stands by and takes an anonymous role while observing. (Casley&Kumar,1992)

Direct observation is when the observed know that they are observed and are aware of the reason for the observation (Ib Andersen,1990)

Our experience comes closer to a direct observation than participatory observation. One of the village people in Gumbang offered a guided tour in the forest. We got to see selected kinds of the different plants and trees and how they were cut, but it was a fact that the ‘social reality’ was arranged.

We had hoped to get more opportunities to observe the village people while they were collecting NTFP’s to get a better insight of the collection of NTFP’s, but we experienced two limitations.
1. The village people had difficulties in telling exactly when, during the day and the week, they did collect NTFP’s. 2. We were not used to walking/climbing in the forest and found it rather difficult to keep up with the village people.

The overall problem of using observation-methods is that ‘reality’ is experienced and defined by the observer. The observed do not know what the observer ‘chooses’ to see and can not influence the results.

**Semi-structured interviews:**

We chose from the very beginning that the main part of our interview should be based on semi-structured open ended interviews. There are certain arguments for using semi-structured interviews in a project like ours such as, the informants are encouraged to express themselves fully rather than respond to a predetermined list of options, the sequence of the questions is not predetermined and third, the interviewer can add questions in order to pursue interesting leads (Casley&Kumar,1992).

We preferred using this method instead of fully structured surveys, because of several reasons. Our pre-knowledge about our topic was limited and that meeting ‘reality’ would change parts of our project design. These changes should happen during our fieldtrip. We
expected that we should learn from the village people we were interviewing. It required a close contact to the village people and to get that, we could not have solely rely on questionnaires with closed questions. We depended on an open-ended semi-structured questionnaire that could be influenced by the informants.

We had prepared our first questionnaire in Denmark, but when we had interviewed the headmen and had tried the questionnaires twice we changed some parts to create a new questionnaire (see appendix 4). A point was that we had composed the questionnaire in a way that ‘now and before-questions’ came right after each other and it seemed as if the respondents chose “an easy solution” by answering that it was the same ten years ago. We decided to check our suspicion by splitting the interview into two parts, the first where all the questions were asked for the present and secondly for the past. This new way of structuring the questionnaire gave us some new problems. In a couple of interviews; when it came to questions about describing the differences according to time spend collecting NTFP’s, whether it was more difficult or more easy to find the NTFP’s and if more people collected NTFP’s now compared to 10 years ago, some informants ended up either saying that they did not know or gave an answer that did not make sense according to what they had said earlier in the interview. If we did follow up on the informant’s statements, we had difficulties in doing it in a way that did not embarrass the informant. We experienced once that an informant got so confused when we followed up on a statement, that we had to stop the interview. We were wondering why it turned out to be so difficult to answer these questions. It is our impression that the reason for the problem is one of, or a combination of, the following explanations:

1. The interview took too long and the informants lost concentration and forgot what they had said earlier. 2. The formulation of the question was unclear and could be misunderstood. 3. The informants felt we were checking their ability to remember what they had said earlier and got confused/uncomfortable.

As a consequence of the problem we decided to approach our informants with topic focused interviews (the topic-focused interviews will be discussed later).

\[\text{for example one said during the interview that it was easier before to find the wild animals and fruits compared to today, but all in all it had become more easy to find the NTFPs today}\]
Participatory matrix scoring and pairwise ranking

The idea of a matrix scoring is a method where the informant can express the importance of activities, items, products (etc) compared to each other, with another method than verbally. The idea of pairwise ranking is to rank two activities/things against each other. For example; what is best - milk or water? A person may, by using a larger number of small stones to illustrate a high preference of a certain activity/thing compared to a smaller number of stones to indicate a low preference of another activity/thing, indicate their preference.

As a minor part of the semi-structured interviews we decided to incorporate participatory matrix scoring and pairwise ranking (appendix 5). We had foreseen that our informants most probably would not be used to being interviewed, so we tried a method where the informants were more active. We made a scheme in which they should rank to what extend the NTPF’s were used, in the household or for the market. The result of this participatory matrix-scoring, which we tried out in two interviews, indicated that all the NTPF’s were used equally in the household and for the market. We had several reason to consider if the results were trustworthy. First, the background of the informants. The informants had told us that their regular collection of NTPF was mainly for the market. Second, the fact that we had given them eight corns made it possible to make a 50/50 score. The 50/50 score was given by both of the women for all products, before and now, which can be seen as a way of being neutral. Third, it was doubtful that we had chosen the NTPF’s to be ranked. We could not be sure that these NTPF’s were the ones the informants collected and we had not defined the wild animals either. We decided that there were too many uncertainties in the set-up of our matrix resulting in such a doubtful picture, that we could not legitimise continuing with the matrix method.

We attempted to use the pairwise ranking in two interview because we thought it would be interesting to know what village people used their money for at the market. We realised that the few options we had in the scheme were not relevant to rank, and that we did not know how we should use the information. As a consequence we decided not to go on with pairwise ranking.

Topic focused interviews.

The idea of topic focused interviews is to create a situation where the interviewer is free to phrase questions and dwell in detail on matters that particularly excite the informants. The interviewer has a list of topics and sub-topics and do not have to follow a certain line, but can
pose the questions when there are relevant. (Casley\&Kumar,1992)
During the last 6 interviews in Gumbang we changed our approach of questioning to the informants because we had the impression that the villagers did not feel very comfortable with our questions, resulting in many unanswered questions - especially those - as mentioned earlier - where the informants should answer whether there had been a change within the last ten years or not and explain why. At the same time we did put even more emphasis on the introduction to ourselves and emphasised that our supervisor was joining the interview, not to check the answers of the informants, but to see how we were doing. Our experience with topic focused interview was positive (keywords in appendix 6). The conversation was easier and we received a lot of information. It seemed as if the informants felt more relaxed and the feeling of an "examination" was out of the interview, which seemed to have a major influence on the way the informants answered the questions. Using the topic focused interview method we did not experience even once that people refused to explain what they had just said, or becoming confused if we pointed out some constraints in what they were saying. On the other hand the danger of using this method is to loose consistency and not remembering all the relevant questions because the topics can change often. We learned that topic focused interview is a good way of getting a more relaxed interview with people who are not used to be interviewed. By using the knowledge from the former interviews during the topic focused interview can make the interviewer and informants come closer to a discussion-like situation. The interviewer then has pre-knowledge about the topic and can more easily follow up on the informant’s statements and get the informant to explain exactly what he/she means.

The method can also be used as a sort of an informal interview to get some overall information about a certain topic. The interviewer can ask overall open-ended topic focused questions that gave the informant opportunity to answer exactly what he/she finds is relevant for the topic. The interviewer can use it before making a more specified semi-structured questionnaire.

**The role of the interpreter**
During the whole fieldtrip we were very dependent on our interpreter, Carol. She was a second year student at Social Science at UNIMAS. Her English was not fluent and it was the first time she had the role as an interpreter. In general our experiences with her were positive,
we could communicate with each other without any serious problems.
It sometimes happened that the informants gave an answer to a question that was not asked, and we discussed whether it was our formulation of the question that could be misunderstood, did Carol change something in the question before she asked it to the informant or did the informant misunderstand/refuse to answer the question? The same problem could arise the other way around. If the informant formulated an answer that could be misunderstood, Carol may change something in the answer or it was us who misunderstood the answer. We discussed the issue with Carol and went through the questions/keywords and used other words on the questions/keywords to make sure that we understood each other, but the problem can not be totally eliminated. Before an interview we always made sure that the interpreter was sitting in a position where she could have eye contact with the interviewer as well as the informant, and that made it possible for the interviewer to repeat or reformulate the questions if the interpreter seemed not to understand the questions.
We have discussed to which extend Carol has biased the answers we received. Our experience is that she did not adopt a critical attitude to our project, but at the same time we know that she did select what to interpret according to what she thought that we would like to hear.

**Keyinformants:**
Our key-informants in Gumbang were the local headman and one of the schoolteachers. They provided us with overall information about the inhabitants and told us about the history of the village.

**Selection of informants:**
We found the informants from different criteria:
1. The key-informants pointed out some of our other informants. This creates a biased group by the key-informants understanding of whom we would like to talk to.
2. Some informants suggested other village people to be interviewed. The group could be biased by the informants’ relationship to other villagers.
3. We knocked the doors where we thought somebody would be home. We tried to choose houses of both bricks/cement and wood-houses structure.
5 Conclusion

Our project is a result of a long process where we have tried to design a project that reflects the experiences we got during our fieldstay in Sarawak. The meeting with Bau, Opar and Gumbang reminded us that reality often turns out to be different from what we had expected. The stay in Gumbang/Opar was a challenging and very difficult process of changing focus, changing objective and changing the way we were asking our questions. During the fieldtrip and afterwards we have been reflecting on our methods and have considered what we were doing, how were we doing it, and how we could do it in another way. These legitimising questions have been very important and have lead to a lot of frustration, but at the same time it learned us that the process of developing an objective and make a questionnaire that is clear and relevant is long and very challenging. Fortunately this project has been open for changes all the time, we could change our objective and our questionnaires as we wanted. We ended up with a project, with a different objective from what it started as and based on interviews where both the type of questions and the way they were asked, were different from our original ideas.

It is our opinion, being two persons in a group has put a limitation on our fieldwork. We were just two people having to conduct all the interviews. We would have liked to have a larger sample for each interview method tried, before we changed from one method to another. This would have given us a greater legitimation for changing from one method to another.

Looking at our main objective we did not find the great changes that we had expected. We had actually thought that the market had had a bigger influence on the collection of NTFP. According to our results there has not been any significant changes in what the villagers are collecting from the forest when looking at plants and fruits. It is only the amount of animals that seems to have decreased according to the villagers due to different changes. It did not have a direct relation to the road but instead there were more villagers hunting and there were more villagers owning guns.

This means that we can not prove a tendency in changes in what is being collecting due to better access to a market.

According to our results there has been a little change in what the collected products are being
used for. Before the road the villagers hardly ever went to the market to sell anything but as it looks today almost all of our informants said that they would sell a surplus at the market. This change has happened due to the better access to the market.

We can not point out a certain change in livelihood practises for the people we were talking with due to the development in the last decade. The reason why there has not been any major changes can be found in the fact the road is still quite new and it is to early to see any big changes. Collection of NTFP seemed to us to play a quite important role for the household, but not for the household economy. The villagers get their money from relatives or/and sale of other activities or/and (cultivated) products that are not related to NTFP. NTFP ‘provides’ the household with fruits and plants (and animals) when it is needed and that was the same picture before.

It could be interesting to go back to Gumbang in 5-10 years time and see if it would be easier to find some changes due to development. We think that it is a village that is just in the beginning of a transformation from a more traditional community to a more “modern” one and it would be interesting to see which role NTFP’s would play in the future.
## Appendix 1


<table>
<thead>
<tr>
<th>Date</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wednesday 7.10</td>
<td>Informal interview with headman Opar</td>
</tr>
<tr>
<td>Thursday 8.10</td>
<td>Informal interview with headman Gumbang</td>
</tr>
<tr>
<td></td>
<td>Informal interview with headman Doyoh</td>
</tr>
<tr>
<td>Friday 9.10</td>
<td>Direct observation, Gumbang</td>
</tr>
<tr>
<td></td>
<td>3* Semi-structured interview, Gumbang</td>
</tr>
<tr>
<td>Monday 12.10</td>
<td>Structured interview with 25 stallkeepers at the market in Bau</td>
</tr>
<tr>
<td></td>
<td>Focused “group” interview, Doyoh</td>
</tr>
<tr>
<td>Tuesday 13.10</td>
<td>Semi-structured interview, Gumbang</td>
</tr>
<tr>
<td>Wednesday 14.10</td>
<td>2* semi-structured interview, Gumbang</td>
</tr>
<tr>
<td></td>
<td>“group” interview, Gumbang</td>
</tr>
<tr>
<td></td>
<td>Topic focused interview, Gumbang</td>
</tr>
<tr>
<td>Thursday 15.10</td>
<td>7* topic focused interviews, Gumbang</td>
</tr>
<tr>
<td>Friday 16.10</td>
<td>Topic focused interviews, Gumbang</td>
</tr>
<tr>
<td></td>
<td>2* informal interviews with keyinformants, Gumbang</td>
</tr>
<tr>
<td>Saturday 17.10</td>
<td>2* Informal interviews, Gumbang</td>
</tr>
</tbody>
</table>
Appendix 2

Interview guide for interview with the headmen.

- village history
- what people are doing in the village
- how many collectors
- which products are being collected
- any selling at the market
- transportation to a market/which markets
14. Have you decided what you to collect before you go out? Why/whynot?
15. Why do your household collect products from the jungle?

CULTIVATED PRODUCTS

16. Do you cultivate anything yourself?
   a) What do you cultivate?
   b) How far away is your field? Why?
   c) Do you collect jungle products on the way to the fields?
   d) How often do you go to the field? (What do you do the other days?)
   e) How much time do you spend in your fields?

17. What do you do with your cultivated products?
   - The household?
   - The market?

18. How often do you go to the market to sell your jungle products and cultivated products and which one?

19. How are all the products transported?

20. What are the costs for transportation and stall-fees for both the jungle-products and the cultivated products?

21. How long time do you stay at the market to sell the products?

22. Why do you sell your products to another stall-keeper?

23. How much money do you earn on selling all your products?
   (In week/month/year). Part: jungle-products / cultivated products?

24. Why do people sell their products at the market and not in the village?

MARKET RELATIONS.

25. Does your household get money from somewhere else?
   - From where?
   - How much? How often?

26. Does your wife/husband work?

27. Do your children send you money?


29. How often do you go to buy things at the market?

30. Which food-products do you buy at the market?
31. Are you saving money?
   - What for?

32. What is your future plans?

33. Has it become more easy/ more difficult to get the forest products?
   - Why?
Appendix 5

Participatory Matrix scoring:

<table>
<thead>
<tr>
<th></th>
<th>FERNS</th>
<th>BAMBOO</th>
<th>FRUIT</th>
<th>RATTAN</th>
<th>ANIMALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUILDING MAT.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OTHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pairwise ranking matrix:

<table>
<thead>
<tr>
<th></th>
<th>FOOD</th>
<th>CLOTHES</th>
<th>BUILD.MAT.</th>
<th>PETROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLOTHES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUILD.MAT.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETROL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 6

Topic focused interview

Name
Age
Numbers in the household
Main occupation

To all the following topics we were asking about before and now.

Use of forest products
- Which ones (plants, fruits, animals)
- Easy/difficult to find
- Time spent
- What are they used for?
- Importance for the household

Cultivated products
- Which products
- Time spent on cultivation
- Used in household or sold at the market

Market
- How often they go to the market
- Transportation
- Money earned
- The importance of the road for going to the market
- Why selling at the market

Economic situation
- Income from somewhere else (children/other jobs)
- Buying at the market
Literature:

Books:

- Andersen, Ib: "Valg af organisations-sociologiske metoder"
  Samfunds litteratur, 1990.

- Brookfield, Harold: "In the place of the forest"
  United Nations University Press 1995

- Casley D.&K.Kumar :"The collection, analysis and use of monitoring and
  evaluation data", World Bank 1992

Articles

- Beer, Jenne de& McDermott, Melanie J. : "The Economic Value of Non-Timber
  Forest Products in Southeast Asia", IUCN Amsterdam 1996

Work of reference:

"Webster’s Encyclopedic Unabridged Dictionary of the English Language"
Gramercy books, New York/Avenel 1994