



Terracing at the SALCRA Oil palm plantation near Kpg.Opar.

Changes in Land Use Practices in Kampung Opar Caused by Sarawak's Official Policies on Land Tenureship and Land Development

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Shifting cultivation activity in the Kpg. Opar area.



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1. Abstract.

The paper includes a description of the process we went through since the preparation of our tasks in Denmark to the end of the field work in Malaysia, and enclosures the information obtained.

The main objective of the field work was to gain experience in using the methods and the advantages and disadvantages of using them. This was also a way of learning about the obstacles in field work and how to deal with them. In order to reach that objective we chose a topic to study, which was: "Sarawak's Land Tenureship and Land Development Policies impact on Land Use Practices". We had to collect data to obtain the information needed on that issue we were studying.

The process to find and define the topic was time consuming. The members in the group were from different backgrounds, and we had limited information of the area. We also had to redefine our topic and objectives several times until we decided to concentrate in the theme mentioned before.

In order to collect our data, we used different methods, but mostly qualitative. These were mainly based on a combination of interviewing and observation. All the methods us had advantages and disadvantages, specified in the course of the paper.

We got several findings important for purposes. In some of the cases, the relevance is limited due to the time constraint and the reduced number of respondents. The main findings were the existence of the Sarawak Land Consolidation and Rehabilitation Authority (SALCRA) scheme and the agricultural schemes. These have had an impact on the rural livelihood and the agricultural panorama.

To conclude, we have discussed some of the findings and put some perspectives into consideration.

2. Introduction

We have structured the paper in sections. In each section, we tried to mention only relevant issues due to the limited scope of the paper.

2.1. Our Objectives.

For our study, our *main objective* is:

" To examine changes in land use practices in Kpg. Opar caused by Sarawak's official policies on land tenureship and the land development".

Most part of the land in Sarawak is untitled. It is mainly Native Customary Right (NCR) land or State Land (SALCRA document). These "undefined" property rights have an influence on how resources are used (Bromley, 1991). Due to the unproductive use of NCR land, the Sarawak government decided to carry out specific land development programs. The main programs were SALCRA and the introduction of the agricultural schemes. We decided to work with this objective.

Our *immediate objectives* are:

- To look at the trends in agricultural practices in recent years and eventual changes.
- To examine and describe Sarawak state policies on land tenureship.
- To identify the land use practices with different types of tenureship in order to identify possible linkages between the two.
- To examine the land development programs implemented in the area: SALCRA and the Agricultural Schemes.
- To study the effects of SACRA and the agricultural schemes on land use practices in Kpg. Opar.

2.2. Our Hypothesis are:

- The different land policies may have an effect on what is planted in the area.
- The insecurity of land tenure may affect the decisions peasants take on what to cultivate. If they have land insecurity they might not invest in long term crops.

- SALCRA may have affected the production of crops.
- There might have been a shift from shifting cultivation to other agricultural practices due to the introduction of the SALCRA program and the agricultural schemes.
- There may be some conflicts regarding land tenure issues.

2.3. Our Limitations are:

Some of the most obvious theoretical and methodological limitations of the report are:

- We are not covering agronomic and ecological aspects of land use (soil, water, etc.).
- We are only including the land tenure systems in relation to agricultural practices.
- We will not give detailed economic results about the effects.

2.4 Structure of the Report.

The whole process we went through is discussed in *chapter 3*. There we describe the problems we faced, the things we had to change and the evolution of our field work. In *chapter 4* we mention our main findings. We are looking into how the introduction of the SALCRA program and the agricultural schemes have changed the agricultural panorama.

In *chapter 5*, we are discussing the methods used. They have been mostly qualitative. We carried out different types of interviews, direct observation, mapping of the area. In *chapter 6*, we conclude on the main aspects of the report and present the future perspectives.

3 Methodology.

3.1 Group Formation, Initial Project Design & preparation of Field Trip.

Monday the 31st of August 1998, we arrived to the introduction day of the Sustainable Land Use and Natural Resources Management education program at KVL (The Royal Veterinary and Agricultural University). The program is a joint venture between three universities and The Ministry of Energy and Environment.

A presentation of the program was given, and a list was distributed with specific topics to be examined. We were presented to our own team (The Bau Team), and we were asked to talk about our current work and studies in our home universities. We had to divide into sub-teams of 2-3 persons with different academic background. The process to get together lasted 2 weeks.

We were three students from different educational backgrounds. Jens Færge, is a student from KVL, Department of Agricultural Sciences. He is specialised in soil sciences. Anna Vila is also a student from KVL. She is specialised in agricultural economics. Joachim Dartell is a student from the University of Copenhagen. He is specialised in socio-economic studies in the Middle East area.

We were supposed to work together in a multidisciplinary way. Jens was interested in soil sciences, and he was most keen on working with land degradation and soil. Anna wanted to look into a broader macro economic perspective, and to focus on state and local policy levels in Malaysian agricultural development. Joachim was interested in determining impacts of water pollution upon the livelihood of inhabitants in the river catchment area.

We were trying to formulate our ideas based upon the Sungai Sarawak paper (Mohamed & Mamit, 1997) which we read. We were discussing which of the three issues was most interesting for all of us. It was a long and interesting discussion, especially when taken into consideration our different educational backgrounds. We had to limit our project to the main theme " Sustainable Land Use and Natural Resources Management", without losing the main focus which is how to use natural resources in a sustainable way for the environment and the population.

3.2 Finding a Topic.

We came to the conclusion that the most interesting study for us should combine natural science knowledge and studies upon land degradation problems. It should include political and socio-economic aspects of governmental policies in relation to agricultural practices and development of the Bau area. That was actually the substance of our original problem formulation.

We realised, from discussions in the group that the content of our subject seemed too broad and complex, as well as time-consuming. We only had ten days of actual fieldwork. The reason why the content of our problem formulation was so broad, was due to the fact that our knowledge about the area was limited.

We were not sure about the exact geographical location in the Bau area for our fieldwork. We assumed that the demographic composition of races, tribes and religion, as well as the literacy level, income diversity, etcetera would have an influence upon the agricultural practices found in the area.

In the Sg. Sarawak paper we saw that the river catchment area was probably polluted down stream. We were looking closely for sources of pollution: Production activities, waste management, urban development perspectives, utilisation of chemicals, logging activities, plantation activities, large - scale crop production, et cetera.

We chose to look at agricultural practices and their consequences for the land. We wanted to “find” soil erosion or soil degradation, but the topic would be too specific and not interdisciplinary enough if we were to learn to work together and to exchange ideas based upon our different educational approaches. The problem was that we were only “looking for a natural scientific problem”. We were advised to define a problem formulation, which was dealing with more central issues of general relevance for the field trip.

We realised from the literature, that the level of high-scale mono-crop agricultural production was not the major factor causing degradation and pollution. We discovered that the amounts of fertilisers and pesticides used were not significant in terms of impact on the environment, because the soil in the area has a high ability to absorb these chemicals.

We decided to focus more broadly on agricultural practices, impact on land degradation, and governmental policies dealing with prevention of environment degradation. We realised that there were several factors affecting the agricultural practices as for example: increasing population, migration, urbanisation, etc. We decided to study: "The Impact of Modernisation on Land Use Practices". We wanted to describe the socio-economic and ecological impact.

We made searches for relevant literature in libraries. Jens decided a week before our departure to Malaysia to quit the "SLUSE" program. Our main problem was Jens's know-how about soil sampling and testing would be essential to our project. We had to eliminate the natural scientific part of our project.

We realised from our literature (Elone, 1994) that land tenure was a problematic issue to address. Property rights were often not established or maintained in Borneo. There was a lack of legislation. The laws were old, and seemed not to address local customary land tenure issues in a way suitable for the needs of the population of today. The judicial instruments for protecting access to land and property rights needed to be revised (Hooker, 1980).

We connected the property rights issue to land use. We hoped that by examining the customary land law and traditions, we could gain knowledge about the present land use conditions. Questions arose in our minds about the functioning of land distribution within the last centuries and about recent changes in Sarawak.

We chose the title "Impact of Customary Land Tenure Law on Land Use Practices" for our project before we went to Sarawak. We had to discuss again which methods could be used for examining the subject. At first, we tried to make a master plan about the activities and how to perform them within a Logical Framework Approach. It's content was practical field activities, problems, and methods, in order to reach our objectives. We also made a time schedule. The working plan was a draft we made in Denmark to organise our fieldwork. It started from day 1 of the fieldwork in Malaysia until the last day when presentations of our collective work would be made at UNIMAS.

We had to choose between quantitative and qualitative questionnaires (see appendix A). We started formulating questions, which we thought would be relevant to the research. At that moment, we started to think about how to get additional information about our specific topic. We wrote to the Malaysian students and professors to get more knowledge about the Sg. Sarawak area. We tried to

ask other SLUSE lecturers without any success. The lecturers told us that they did not have sufficient time for advising their "own" teams, so they could not spare us any of their time. We did not receive any answers relevant to our work either from our Malaysian counter-part. There was a co-ordination problem regarding Internet access, and the students were off campus for holiday. So we had to wait till the day when we were further briefed at UNIMAS

By the time we arrived to the study area, Kpg. Opar, the chosen topic had developed into "Native Land Tenure Customary Rights Impact on Land Use Practices".

We started getting a clearer picture of the land tenure rights in our area after the interview with the chief from Kpg. Opar. We got to know that all the land used for agriculture was NCR land and that many people had given a part of their land to the SALCRA scheme for the plantation of oil palm. At this point we discovered that there was a plantation at the village. We also learned the roles that SALCRA had in the village. The chief of the village said that it was part of the development plans from the government, and it was supposed to improve the community land. However, we still had limited information.

In the middle of the fieldwork, when we already had done around eight interviews, we made an evaluation of the results. We had got much information, but unfortunately only little of that could be used for our objectives as they were defined until that moment. We could not find a direct link between land tenure and the land use practices, but we had been getting broad information about land development strategies.

We thought that it would be a suitable to readdress the object of our study and include the "Land Development Policies Impact" in it. We redefined our objectives, and what should be included in our studies. The new topic turned into "Land Development and Land Tenure Policies Impact on Land Use Practices".

Due to the change in the topic, we needed to revise our questionnaires. We included many questions related to the land use practices, as: area planted, types of crops, the fallow periods, the growing period for the crops, use of fertilisers and pesticides, etc. We asked these questions for each specific crop important for the livelihood.

3.3 Key Interests.

After we knew about SALCRA's existence, we formulated new questions. We wondered about the functions and the purposes of SALCRA, if it was a good system for development, and what did the people think about it.

We also needed to decide who we wanted to interview apart from the peasants, and then elaborate the surveys and think of all the questions we wanted to ask. In the middle of the field work period, we felt the need to decide how many more people should be interviewed, and which kind of people were relevant for our purposes. We divided them mainly into three groups: Key informants as people from governmental offices, peasants that were involved with SALCRA and peasants that had nothing to do with SALCRA. We made a plan including how many and who we should interview in the next days.

We wanted to get some specific information about the particular plantation in Kpg. Opar. Another of the proposes of seeing the plantation is that we had heard that there were areas "inside" the plantation territory that had not been given to SALCRA. We wanted the opinion from the people cultivating the land on these areas, why they had not given their land, and also if they were being pushed to give it to SALCRA. This could give us a broader perspective of how and why the people decide to use their land as they do. There was the possibility that they were more critical about SALCRA or the government development strategies.

After some interviews we found out about the existence of agricultural schemes. However, nobody gave us a clear definition of these schemes. We decided to find out about the agricultural schemes from the staff at the Department of Agriculture when we interviewed them, thus we thought that it was of extreme importance to know if they were promoting some kind of production. This could give us some relevant information on what people planted and why they planted it. It was a way to try to see how land use practices were influenced by land development policies.

3.4 Key Limitations.

It took quite a long time to decide who we wanted to interview and what we wanted to ask. We had to interview people from very different levels: government people such as the District Officer and the staff from the Department of Agriculture and the Department of Land Survey, the head of the

village and different people in the village from different educational levels. It was as well a time consuming process to elaborate all the different questionnaires.

It was often difficult to ask some questions or talk to some people from the government. In the Department of Agriculture in Bau, they referred us to the Head Office in Kuching to get some kind of authorisation. We were told that they could not give us any kind of information without an authorisation from Kuching. At the Department of Agriculture and the Land survey Department in Kuching, we could not get any documentation, because we should have had an introductory letter from UNIMAS and make an appointment in advance, and also because one of the departments was moving to another building. Everything resulted to be much more difficult and formal than we expected.

It was not possible to interview any of the plantation workers on site. They were all claiming to be too tired but our perception is that they did not want to be interviewed among other people, and specially not where they worked but some of them had nothing against being interviewed home.

There were some contradictions in the answers from the questionnaires. We had long discussions in the group to find the reasons for the diversity of results.

3.5 Methods Used.

We mainly used interviews and observation. The major changes during the process were referred to the questionnaires (see appendix A) and the way we were using some of the methods. We experienced that we had change the questionnaires many times. Every time we were collecting additional information, we needed to include new questions, reformulate some of them and take out others.

After some interviews we decided that it was about time to try some observation in the field while the peasants were working. In order to be able to do this observation, we went around to find people to make an appointment with them for the next days.

4 Findings in Relation to Predefined Objectives.

We found out that in our area, KPG. Opar the land was classified as either Native Customary (Rights) Land or land surrendered for a SALCRA development scheme. NCR/NCL is land that has belonged to a person or family for a long time prior to 1958. There is no official registration of ownership. According to Dr. Gabriel Tonga Noweg from UNIMAS, the size of the land has often not been measured.

We have been informed about three agricultural schemes for improving and developing the livelihood of the villagers. The schemes are: 1) SALCRA oil palm scheme, 2) the cash crop schemes, 3) the subsistence schemes for poor farmers. The SALCRA program is the apparently most important program in terms of job creation and income generation.

4.1 The SALCRA Palm Oil Scheme.

It is called an alternative to land resettlement schemes, which can provide employment, prevent rural-urban migration, and helps to reduce rural poverty (Ngidang, 1994).

It is a joint venture investment scheme that owners of NCL land can join. In order to join the project one has to give up a suitable piece of land for a period of min 25 or 60 years. The land should be located inside the planned plantation area. It must not be very sloped. The 25 years is the time needed for planting the land and for two harvest cycles. Sixty years is an extension of the 25 years period for new plantation schemes, in order to guarantee a higher financial gain for potential investors such as joint venture companies (Ministry of Land Development, 1997).

The main advantage of joining is a promised title of ownership after 25 or 60 years and an accurate measuring of the land parcels that the participants have surrendered. Participation is not always voluntary (at least one informant clearly expressed that his land was taken against his will). In case a project needs a specific area to be implemented, the inhabitants can be resettled against their will. Resettlement schemes have supposedly been used in Malaysia as well as expropriation of land without the payment of a proper compensation (The most used reference by educated farmers,

students and professors from Malaysia have informed us about the paragraph 47 in the Land Code which allows expropriation of land for development purposes).

Participants may eventually obtain employment. Eight informants told us that they or a member of their family had obtained a job within the plantation or plantation related activities. Though a full time employment for an entire household is not guaranteed. Salaries for wage earners are as low as RM 8-12 per day.

Contractors can obtain contracts for cutting, planting, terracing. We did not hear about anyone in the village who had received a contract for one of the mentioned activities. The size of the contracts is assumed to be quite important (Mr Andrew Riging, head of the local branch of SALCRA,).

Participants are supposed to receive dividends and bonuses from the palm oil production. No informant out of the 16 farmers had received dividends or bonuses. We asked as well if they knew about anyone in the village who had received dividends or bonuses, the answer was still negative.

4.2 Agricultural Schemes within NCL and Subsistence Farming.

Another approach to help the villagers improve their livelihood is to help them improve and diversify their income sources by setting up “cash crop schemes”. The most important cash crops are pepper, cocoa, rubber, and maize. The most actual cash crop being planted is pepper (6 informants told us that they had joined a pepper scheme. 8 other informants would like to plant pepper if they could join the schemes. The main constraints for them were lack of time available for 4 informants and for the rest the capital needed to join the schemes. The reason for the wish to cultivate pepper is due to high world market prices (The interviewed informants).

There are several criteria to join the schemes so not everybody can join (pepper scheme, see appendix B) . The farmer can not have another main occupation activity at the same time. The number of participants in Kpg. Opar is probably quite limited. The reason for this lack of participation is due to the very low income as well as literacy level in the village (Mr. Christopher

Siphen). Around 50 % of the households have at least one person working in the SALCRA plantation full time. The latter group has about 10 hours per week and the weekend available for cultivating their own land. Many farmers are so poor that they can not even afford to buy fertilisers and pesticides in order to improve their output. The cost of fertilisers and pesticides are the major constraint mentioned by 16 out of 18 informants.

The Land tenure issue should also be kept in mind. Even if a farmer decide to invest all his capital and labour in a government scheme he is not protected from an eventual expropriation, and the compensation paid only covers fruit trees (according to the Headman of Kpg. Opar). The compensation for fruit trees is not adequate for the farmers. It is too old. E.g for a durian tree, the compensation paid is RM 77 only. The income from the fruits gathered in one season from one tree could reach RM 50 at the local market (according to a UNIMAS lecturer). The waiting time before the actual payment of compensation can be long.

The Ministry of Agriculture has launched various agricultural schemes to incite farmers to plant cash crops. Extension office advising is given in the villages and in regional offices in co-operation with the Farmers Organisation. Seedlings, fertilisers, and sometimes pesticides are distributed for free; though the amount is limited and not sufficient according to our respondents.

The farmers have the possibility to sell their production for a guaranteed price which may be 10 percent higher than the price obtained in the local market. The guaranteed price is offered by the Department of Agriculture. The initiative is positive but according to officials (Director Mohammed Karim and The Vice Director Mr. Christopher Siphen from the Department of Agriculture, Bau) the farmers have to invest considerable amount of capital to join the schemes. They do as well have to be available when the extension officers want to advise or monitor the planting.

4.3 Discussion of Findings and Results.

Our primary discovery is that the present use of land covers mostly NCL and the SALCRA scheme. A continuous process of improvements in the infrastructure and development is slowly taking place

in order to realize the vision 2020, which expects Malaysia to have reached an overall development level equal to the developed countries. (The District Officer, Mr. Joseph Jinam.).

NCL has been used for gathering activities and crop production for a very long time. The land has provided its customary owners with a secure food resource. The ownership of land is as well a symbol of status, identity, and attachment to traditions and cultural values. The land has an apparent very strong non-use value at least in the eyes of the Bidayuh people (Ridu, 1994).

NCL land is a subsistence resource in case of difficult economic times. Agricultural schemes have been established with emphasis on cash crops as a means to improve the livelihood of the natives. But the schemes tend to forget to consider the turbulence of the world market prices. Apparently, there are not any subsidies, funds or loans available for the farmer in case that a harvest fails or the market price of the crop drops below the marginal production cost (Mr. Mohamed Karim and Mr. Christopher Siphen.). The farmer is incited by a potential income source. He might have to use a substantial part of his financial resources for the crop scheme participation cost. He may not be incited to diversify his planting into other resource demanding crops or fruits. The risk appears to be high to take if he does not have any other income sources.

It would be an incentive if farmers who followed governmental crop schemes for a long period would be granted a land title as a reward (One medical doctor from Kpg. Opar had this opinion. Though he stressed the need for more free fertilisers. The village had in 1998 only received half of the 224 promised bags of fertiliser, i.e one for each household). It is notice worth that only surrendered land can be titled as a reward for following a specific governmental project. It appears that the national goal is to enhance the production of palm oil neglecting to encourage the enterprise of the individual farmer.

The most recent changes seen in the village are the changing agricultural practices influence on the livelihood strategies. The creation of a SALCRA scheme has made people surrender important areas of land. The jobs created, and the financial incitement to work inside SALCRA has obliged people to considerable diminish or to give up their shifting agricultural practises. They have more or less become wage earners on their own land. If the SALCRA project succeeds they may improve considerably their livelihood. Until now the project has not succeeded in all perspectives.

Several reasons have been given for not full-filling the promises to the owners (Dr. Gabriel Tonga Noweg, UNIMAS) : A) The present financial crisis in Malaysia, B) The profit from the palm oil production is all being used for buying fertilisers and pesticides, and for other costs of running the plantation scheme (Mr. Andrew Riging), C) The planning and implementation process of the scheme was delayed due to a lack of control and supervision by SALCRA (Mr. Joseph Jinam), D) The owners have been less willing to surrender land than it was expected. The process has been time consuming and delaying the planting activities inside the plantation. There is also not surrendered land inside the plantations, which is not cultivated with oil palms. This is viewed as a problem by SALCRA (Mr. Andrew Riging).

We can not precisely determine from our limited fieldwork, which factor or factors may have caused this failure. A reason could be bad planning and a lack of empowerment, participation and awareness of the local people in the whole process from project design to the implementation. This seems apparent when we ask the farmers of the objectives and the results of the SALCRA project. The majority of people are unaware of the economic outcomes of the ongoing program. When we asked “ What do you think about the plantation?”, the informants generally referred to the creation of jobs, a better income, subventions given such as roofing material, communal house building aid, road construction, and dried fish distributed for free. No one mentioned the issue of dividends without being asked first whether he had received any from SALCRA. The people we interviewed, did not express themselves as “owners of the project”, not even participants. The villagers had “just given their land”, they said. One person even stated: “SALCRA took my land”. No villager seemed to ask any critical questions about the program but followed the “band-wagon” as everybody else and let the headman of the village decide for his land.

The young and literate people who have the opportunity, generally prefer to obtain a job in town at a higher pay (according to the villagers). Even if the new generation would prefer to stay in the village no other present perspectives are left than to work in the plantation. Maybe a general increase in wages in the plantation sector could help keeping the young labour force in the villages. Otherwise, the need for immigrant workers from Indonesia would rise. It is an issue that the shareholders, the government and financial investors ought to consider together.

The government is trying to find a way to help the farmers improve their livelihood by the creation and maintaining of the agricultural schemes (Mr. Mohamed Karim). The issue seems to be that the importance of the financial funds allocated to development and the agricultural sector could be discussed in order to find out whether they are allocated in the most efficient way and if their amount is big enough compared to the desired objectives. The objectives are to create improvements in production and livelihood. Various officials(The District Officer, SALCRA staff, Department of Agriculture) see the presence of a competition between the agricultural schemes and SALCRA. They are competing for the same people and resources. SALCRA needs their land and the schemes need their active participation and cultivation.

We hope the farmer knows how to optimise his output with the available resources. He thinks he knows what he needs in order to improve his crop output. They want higher subsidies for crops and fertilisers, pesticides. One farmer told us that the prices of fertilisers and pesticides had nearly doubled within the last five years. Fourteen informants out of sixteen told us that fertilizers and pesticides were the most important agricultural input needed to improve their output.

The farmers interviewed cultivated mostly hill paddy rice, wet paddy rice and maize. Fruit trees: Durian, langsat, mango, and rambutan. Other mentioned fruits and vegetables are: star fruit, banana, citron grass, and chilli.

5. 2 Interviews.

We started formal interviews after some days at the field site. We wanted to collect information about the area and the agricultural practices before starting to interview.

Choosing the Respondents

The first thing to do, was to identify the groups of people to interview: Officers from SALCRA and government officials from the Department of Agriculture and the District Office, the Department of Land Survey, the chief from Kampung Opar, peasants who had something to do with SALCRA, peasants who had no relation to SALCRA.

We were searching for key informants: People from the government, teachers, doctors, etc. Basically, we were interested in persons with a certain level of education with knowledge about the land development programs and agricultural issues. We interviewed several representatives from the government in Bau district, officials from SALCRA, a doctor from Kampung Opar and we had some informal conversation with lecturers from UNIMAS. They were a good source of information. They could explain us the linkage between the different sectors, the development programs and agriculture, and also give an overview of the problems affecting that district, due to their level of education and professional background. The information that we were getting from them was very useful in order to know what we needed to ask to the different respondents.

Experiences with the Different Types of Interviews and Process

Most of the interviews were individual. We were interviewing only one person at a time. We only conducted one interview with three persons together. It was just once, because we were asking questions in relation to governmental policies and it seemed to be quite a sensitive issue. We could observe in the course of the interviews, that when we were arriving to the questions about policies or governmental programs, people were getting anxious or nervous.

We did 19 interviews. The interviews lasted an average of 30-40 minutes when they were not on the field and from one to two hours when we were combining interviews with some observation methods.

The types of interviews we used are:

structured interviews

- We had to elaborate several questionnaires (see appendix A). The questions had to vary depending on who they were addressed to. The results from the first interviews were quite different from one interview to the other. They were quite contradictory, so we did not know how to value the outcome. We had some disagreements in the group when trying to find explanations for this variety of results. It could be because the respondents came from different social levels; or because in some of the cases they felt too observed, and maybe they were afraid of answering honestly; or because we were not using the right method to ask the questions or we were inexperienced.
- We were told by our supervisors that our *questions were too structured*, that we had too many questions with “yes” and “no” answers, and that in some of the cases we needed to ask more about a certain matter, even if we had not inserted the questions in the paper. We could see that structured questions were not leading the conversation to a discussion where we could get some interesting points, and get additional information.
- However, when we were interviewing the farmers, the *questions* still had to be very *structured*, clear, concise, and going to the point. We realised that at the beginning, our questions could imply several answers. We had to do them more precise. *Structured interviews* worked satisfactorily with low educated people. The questions had to be concrete and precise, and sometimes we needed to lead them.

Semi-structured open-ended questions

- After a while, our interviews became more open. They were many times based on a list of topics, rather than structured questions. Our purpose with that change was to try to see if this way would be more effective and if we would get better results than with structured questions. From that moment we had no major problems with the structure or the method used for interviewing. We could concentrate more on the way a certain question was formulated, and if there were other ways to formulate it better.

- *Open ended questions* gave us better results than structured questions. They also led to discussion in some occasions. Sometimes they raised new issues that we could use for further study.

informal interviews

- We conducted the interviews in a informal way but actually we obtained more profitable results. We started conducting the *interviews based on several topics* that we had listed. The questions were improvised. We were elaborating them in accordance to the answers we were getting, in order to get a linkage and create a discussion. Besides that, when we interviewed the officials from the government and the head of the local SALCRA branch, we got very useful information and we were actually quite surprised that they answered so openly and discussed some of the issues in a relaxed way.
- We realised that when we were *interviewing informally* we were getting better results. We only had a list of topics to use as an introduction to a discussion. The way to interview was more interesting and the discussion created was giving more information than expected. This method functioned very well when interviewing people with a certain level of education.

group interview

- When people were sitting in groups they seemed to be afraid to answer some kind of questions, and we were not getting anything useful out of the method. Other times, we asked groups of people if we could interview them, but when we were explaining the topic, they would not accept.

general problems in the interviews

The supervisors also thought that it would be a good idea, if it was only one person at a time asking the questions. This was in order to avoid problems and disagreements in the group. Sometimes the person in the group that started the interview felt that he or she was losing the track or the point where he or she wanted to get to, by the interruption of the other person. This caused some tension, so we agreed to have only one person conducting the interview

One of our mistakes was that we started with the formal interviews too direct, without creating a relaxed environment where the interviewed could feel more confident. We could also see that one of the common mistakes we made was that we *did not introduce us properly* at the beginning of the interviews and we did not make clear enough that everything discussed would be kept confidential. As a result, we started introducing us, explaining where we were coming from what we were doing and clarifying that everything that would be said would be between us.

We often found it *difficult to get some accurate information from the farmers*, especially at the beginning. It was very complicated to ask about: size of the land, a list of all the crops, all the different trees, etc. We often had to guide the answers. We were often mentioning the kinds of crops, the use of fertilisers, etc. to remind them on these things. This is “dangerous” because they can answer the things that you expect to hear, instead of being honest . On the other hand, we would lose a lot of information if we did not lead them and asked about any single crop and tree, and any single important characteristic about them. We also had to ask them about each single crop and tree, otherwise they would presumably not mention half of them.

Another problem we had to face is that one of the supervisors from UNIMAS was interfering in the way we were conducting the interviews. He was frequently telling the respondent things we could not understand, reformulating our questions, implying already an answer when asking the questions, taking pictures to peasants while we were interviewing them, showing up at interviews without asking us if he could join us, and answering before letting the other person do it .

As we explained in Chapter 3, we could not interview anybody from the Land Survey Department or the Department of Agriculture in Kuching, because we did not have an introductory letter, and we had not made any appointment with them.

5. 3 Observation.

We decided to put in practice this method after we had been doing some interviews. This method was mostly used as a kind of setting for our interviews. However, we conducted some observation without performing any interviews. There were several reasons to use this method:

- To get a visual idea of the things that were planted and types of agricultural practices. In this way, we could identify some things by ourselves, without needing to ask questions.
- It was difficult to get information from the farmers about all the things that they were planting. They always seemed to forget something. We thought that if we could see the crops and trees by ourselves, we could then ask questions about them.
- Sometimes we were interested in getting specific information about a certain land use system. We were identifying the place and then interviewing the person on site.
- From some of the respondents, we knew that there were areas cultivated that were hidden in the forests or at the slopes of the mountains. They could not be seen from the village or the roads. We could interview some of this people to know why they had not given their land to the scheme. They were a good source of information. They gave us new perspectives of the problems.

The advantage of this method is that it is much easier to ask about the different crops. We could just point at them. They were also giving much more details about the crop, and the description is very graphic and visual. Generally, they also liked to be interviewed there. We could see they were glad to show us around. The disadvantage was that it was always taking more time than we had calculated. Once they were getting confident with us, it was difficult to leave.

6 Conclusion.

6.1 The Journey in Malaysia and Fieldwork Experience.

The most important result that we have achieved is learning how fieldwork is performed and how to deal with field related problems such as transportation problems, translation, interpretation difficulties and intercultural understanding issues. It has been a rewarding fieldtrip, as we have been able to practise theoretical methods. We have set goals, which we have been forced to change as a natural step in a lasting process. We believe to have experienced by ourselves many obstacles in a typical field research project. We hope that this experience is a solid preparation On “how to approach” a thesis writing.

6.2 Methods: Their Usability and Relevance.

The very process to examine usability and relevance of various methods is complex. In the field, we also had to consider who, how and why we interview a person. We had to decide which kind of approach to use in each interview session. The informants' social position, level of education and his objectivity are some of the factors that we were aware of when preparing and performing a survey.

Even after these preliminary precautions, often the methods did not always have the expected outcome. The major distorting factor laid often in presenting the purpose of our work, the understanding and interpretation of our questions to rural informants, because we spent most time within the village area. We had as well to individually value the objectivity of institutional officials to try to eliminate subjective biased information, which we may have obtained from them.

6.3 Findings.

We have found two major development schemes, the SALCRA project and the agricultural schemes from the Ministry of Agriculture. These two programs have been the foundation for the on going land transformation process. Plantation activity has made its impact. Most land in the

area of Kpg. Opar is used for palm oil plantation activity. The majority of the villagers occupied in the agricultural sector have either surrendered their land to the plantation or are working with plantation related activities. The remaining villagers who are cultivators in the village area are being advised to join a cash crop scheme. The main purpose is to improve the livelihood of the farmers and to halt migration to the towns. A result of these development activities is a decreasing size of the area available and used for shifting cultivation and subsistence farming, according to the local population and officials.

6.4 Discussion of Perspectives.

We believe that these development activities are needed in order to develop the area but that they focus too much on a potential gain without securing the livelihood financially in case of failure. SALCRA is a vulnerable project in the sense that unforeseeable factors such as world market prices, weather phenomena, etc are probably not sufficiently valued in relation to the importance of a steady income source of the farmers.

This future income source, will it be as profitable as expected? The labour force is ageing and there is a lack of willing employees who want to work for a low salary in the plantation sector. The plantation seems to have two choices either to significantly raise the salaries or begin a mechanisation process. To put up the salaries will increase the general running costs and lower eventual profits for share owners. It may effect decisions regarding the very establishment of future plantations in Malaysia.

Mechanisation may supplement the lack of employees, but it can as well become a source of unemployment for the present workers who will have to join an agricultural scheme or get a work without the village.

Yet, the uncertainty perspective prevails for the future of the NCL ownership. We hope that if the land titles were issued, more people would be ready to consider going into a kind of a co-operative production facility in order to improve their individual financial output Today this is not possible. One can not sell Palm Oil Fruits to the SALCRA oil mill, without being a project member.

It is worth notice that the only way a farmer can secure his land is by giving it up for a long period. Legislation and land rights may be altered within a perspective of 25 or 60 years. This land transformation policy is expected to improve the development to the benefit of the whole Malaysia. It is interesting to know whether the needs of the poor subsistence farmers have been examined carefully and have been valued sufficiently enough in order to improve their livelihood.

We have heard from officials (Mr. Andrew Riging, SALCRA) that this policy is the only way to prevent people from selling their land and loose their ability to sustain their livelihood. It can be discussed if this is a good reason for not giving the farmers ownership over their land, and how can land otherwise can be developed if the ownership issue is uncertain.

The agricultural cash crop schemes are competing with SALCRA for the same employees and land resources. These schemes help the farmer to develop his land on a small scale as the schemes only accept a limited size of land of 0.1-0.2 HA per farmer. The participation is limited to farmers full filling several preconditions. The financial contribution of the participant is important. There are no help to obtain in case of failure.

6.5 Our Suggestions.

We have thought about the establishment of agricultural co-operatives. The government could give tenure rights or property security guarantees to the NCL owners participating within the co-operative. In that way, the farmers can be empowered and decide for themselves what to plant on an area suited for their abilities and needs. Financial and extension advises should be available freely to co-operative projects. It could be a fruitful supplement to the schemes. There should also be a possibility to borrow money with land as security to finance investments in farming equipment and machinery. These ideas ought to be considered if the aim is to achieve a faster development of the rural areas, and if other development funds are not available. The land rights issue regarding ownership of NCL and the official issuing of secure titles should be dealt with as soon as possible. A clarification of rights and ownership to land will probably influence on the use, development and conservation of the land.

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Appendix A.

Survey

Survey for the head of the village.

- 1) How is the community land distributed among villagers?
- 2) How do you intervene if there is a problem inside the village regarding whom has the right to cultivate what land?
- 3) Do you judge by yourself, or do you consult other persons before deciding?
- 4) What happens if someone disagrees with your decisions?
- 5) Do the local authorities give you complete power to decide, or do they intervene sometimes?
- 6) Does it happen often that there are problems with outside people using your community land without your permission?
- 7) What do you do, if people from another village plant or harvest from your customary or community land?
- 8) Do you have written customary laws, which regulate the land use and rights to the land?
- 9) Do the government interfere in your villages ways of using the land?
- 10) If you should mention the most important problems regarding the governmental agricultural policies, what would it be? And Why?
- 11) Do you have customary laws, which helps the land to be fertile and avoids degradation to the land?
- 12) What is the most important investment needed for the village (machinery, tractor, etc) to be wealthy?
- 13) Do the village have plans for changing the agricultural practices (modernisation, machinery).
- 14) How do you decide what to plant on community or customary land?
- 15) What kind of crops have you planted? Why exactly these crop?
- 16) How do you decide for the length of the fallow period (traditions, written laws, extension office advises, etc).
- 17) What kind of co-operation do you have with the nearest extension office?
- 18) Which are the best services they provide for your village?
- 19) If you should make some suggestions for improving the quality of the services of the extension office, what would you suggest?
- 20) Do the village get any compensation if the access/property rights to your land is changed?
- 21) Has the size of community and customary land area diminished in the last 10/20 years?
- 22) If yes, what kind of cultural, agricultural or economic influence has it made on the life in the village?
- 23) Are there many people from the village who work outside the village in towns?
- 24) Do people in general cultivate their land less now than before?
- 25)

Survey to head of local SALCRA office

Introduction. general information

- What is the main objective from SALCRA?
- What are the parameters to identify which land or area to develop?
- Do you have other projects besides the oil palm?
- About this particular program, what does SALCRA include?
- Who takes the decisions?
- How do you manage to coordinate such activities?
- How do you identify the agents to take part in the process?

Community

- Do you have problems with the community?
- Do you agree on a place to put the plantation with the community?
- What are the objectives from this project for the people?
- Do you think that locals understand the objectives?
- Is there a direct relation with the community?
- Which are in general the benefits for the community?

Facts about the plantation

- What is the area of the plantation?
- What is the amount collected per year?
- Is the plantation profitable?
- Do you consider the damage to the environment?

Compensations

- How does the compensation for giving the land work?
- How do you decide who gets how much and when?
- Have the dividends been paid? Why or why not?

Survey for the Department of Agriculture

Development programs for Kampung Opar

- What is it
- Functions
- Aim
- Criteria. The same for all the villages?

Agricultural Schemes

- What are they?
- Conditions for joining?
- Different products in scheme? Why these?
- How old is the scheme?
- Advantages for people joining. What do they receive? How much?
- Subsidies

Other

- Dealing with shifting cultivation
- Other programs
- Relation with SALCRA

Survey 1.

A) **Qualitative Method** =====) Open ended answers.
=====) Some premeditated answers.

B) **Quantitative Method** ===) Yes-no.
===) Number. ===) Concrete.
===) Intervals.

Questions.

General Questions, Livelihood & Income:

- 1) How many persons are there in your family here?
- 2) Who are they?
- 3) Are you married? If yes, how many children do you have in all?
- 4) How old are your children?
- 5) What do you work with for a living?
- 6) What does your wife/husband work with?
- 7) What do your children do in daytime?
- 8) Do your family have any other income sources? If yes, specify the income sources.
- 9) What is the most important activity for your household income?
- 10) Have you thought about doing any other income generating activity? If yes, specify which activity.
- 11) Did your family buy anything very expensive recently (car, motorcycle, stereo,)? If yes, specify.
- 12) Are there material things you would like to buy?

Tenure Rights, Crops & Cultivation Practices.

- 13) Do you cultivate any land?
- 14) Who decides what land you can cultivate?
- 15) Have you the right to use any land you would like to?
- 16) Who owns this land? If he says me:
 - 17.1) Has the local community given this land to you?
 - 17.2) Do you have any written document on the ownership of this land?
 - 17.3) Has this land always belonged to your family (father, grand father)?
 - 17.4) Otherwise how did your family get it (heritage, rent, donation, lend, communal or customary land)?
- 18) Do you cultivate the land alone?
- 19) What have you planted on it?

- 20) How many times a year do you plant?
- 21) What is the area size of this land?
- 22) How many percent of the land area do you cultivate now?
- 23) How many percent of this land did you plant 10 years ago?
- 24) How often do you work on the field (days a week and months per year)?
- 25) Do you work in this land all year (periods of intensive workload)?
- 26) Which of these problems may affect your output yield mostly: 1) Climate variations. 2) Fertility quality of the soil. 3) Agricultural banking credit conditions. 4) Pests. 5) Wrong seeds. 6) Extension office practices or politics. 7) Other neighbours.
- 27) Please rank the problem types of Q27 according to your opinion (most important=1, least important=7).
- 28) Do you use any of these products: pesticides, weedicides, or fertilisers?
- 29) If yes, Which product do you use most? What is its name?
- 30) Why do you use it/them?
- 31) Did someone instruct you how to use these products?
- 32) How long time ago did you start using them?

Agricultural Advises & Helps.

- 33) What kind of assistance do the nearest extension office provide you (agricultural advises, banking credits, infrastructure development, etc.)?
- 34) Which is the best service that the extension office gives you?
- 35) If there could be a way to improve the extension office's tasks, what would you suggest?
- 36) If your harvest is bad what kind of help do you get from the extension office?

Environmental Issues.

- 37) How has the output yield been in recent years?
- 38) Do you notice any kind of land degradation in your land?
- 39) Have you changed crops in the last years? If yes why?
- 40) Do you think in 10-20 years that the harvest yield will be better or worse than now? Why?

Survey 2 to the villagers

General Questions about Livelihood and Income

- How many persons are in your close family?
- Who are they?
- Are you married? If yes, how many children do you have?
- What does your husband/wife do?
- What do you work with?
- What is the most important activity for your household income?
- Have you thought about doing any other activity? What and why?

About tenure

- Do you have land?
- What kind of land right do you have?
- Are you also allowed to cultivate other land?

Land Use

- What is the size of this land?
- What have you planted on the land?
- How much of the land do you plant?
- How much of the land did you cultivate five years ago?
- How often do you work in the field?
- What kind of problems affect your yield (infertility, weather, wrong seeds, pests, etc.)
- What would you like to cultivate the land in a better way? What do you need?

About SALCRA

- What do you think about the plantation?
- Have you given land to the plantation, why?

Agricultural Advises and Help

- Do the extension officers visit you? How often?
- What kind of assistance do you receive?
- Do you get any help if you get a bad harvest?

Soil Degradation

- Is your land getting less than before? Why do you think?
- What do you think you need in order to make your land more productive?
- Have you changed the crops you have been planting? Why?
- What do you think that will happen to your land in the future?

Survey 3 for the villagers

General questions, livelihood and income

- How many persons from you family live here ?
- How many children do you have?
- What do they do?
- What is the most important activity for your household income?
- Have you thought of doing any other job or activity? What kind and why?

Tenure

- What kind of land right do you have?
- Do you have the right to cultivate any land you want? Who decides that?
- How can you show us that this land is yours?
- What would you do with your land if you had a land title?

SALCRA

- What do you think about the plantation?
- Have you joint the scheme? When?
- How do you join SALCRA?
- What did SACRA give in return?
- What are the objectives of SALCRA?
- How do they contact you?
- What kind of contracts do you have?
- Do they tell you how to plant?
- Do they also help you cultivate the land that is not under the scheme?

Land use

- What size has the land?
- What have you planted on the land?
- Do you have any trees? Why?
- Do you cultivate all the area you have? Why ?
- Did you cultivate the same area some years ago (place and size)? Why?
- How often do you work in the field?
- What kind of problems affect your field?
- Do you use fertilizers and pesticides? What kind?
- Who has shown you how to use this products?
- How long ago did you start using them? Why?
- Does your yield give enough for living?

Agricultural Advises and Help

- How often do the extension officers visit you?
- Do they visit you at home or at your land?
- What kind of assistance does the extension office provide you?
- Is there anything you need or would like to have to cultivate your land?
- Do you get any help if you get a bad harvest?

About the soil

- Is you land getting less than before? Why?
- What do you need in order to make it more productive?
- Have you changed the crops (what you where planting before and what you are planting now?)
- What do you think that will happen to your land in the future?

Survey 4 to the villagers

General questions, livelihood and income

- Persons in the family. who?
- Number of children
- Occupation of the members of the family
- Occupation of the respondent
- Income generating activities
- Other crops?

SALCRA

- Joined SALCRA? why ?
- Believed SALCRA objectives
- Contact from SALCRA
- SALCRA and tenure
- Help from SALCRA
- Satisfied with what they get?:
 1. Dividends
 2. Compensation
 3. Jobs
 4. Land title

Agricultural Scheme

- Received help
- Visits frequency
- Meeting place
- Kind of assistance
- Conditions for joining the scheme
- Farmers Organization relation to scheme
- Other kind of assistance?

Land Use

- Size of land
- Crops planted. List.
- Trees planted. List.
- For each of the crops and trees:
 1. Fallow period
 2. Period until first fruits collected
 3. Period planting in the same area
 4. Fertilizers, pesticides, weedcides

5. Most important of the things planted
6. Reason for not planting other things (only imp. as pepper, rice, rubber, etc)

- Changes in the practices in the last years
- Kind of problems affecting yield
- If land tenure secure, what would they plant?
- If more help? What would they plant?

Interview with The District Officer, Mr. Joseph Jinam.

■ What are the main functions of the District Office?

How do You co-ordinate these activities?

■ Are there any current development projects in the Bau area?

Is the District Office involved in these projects?

Are there any difficulties regarding the projects implementation?

What kind of assistance can villagers obtain at the District Office in case of a dispute in a project context?

■ How is the co-operation functioning between The D. O. and SALCRA?

What kind of influence does the District Office have on the managing of the SALCRA program ?

... Are You aware of SALCRA's non payment of dividends to its shareholders?

■ How do You perceive the future for the Bau area regarding development?

What are Your main objectives within development in the area?

What do see as the main problems for developing the area?

■ Are there any one in particular You could suggest we should talk to?

Appendix B.

PEPPER PRODUCTION SCHEME

1. OBJECTIVE

The Pepper Production Scheme will give equal provisions to the development of the value-added pepper products, the establishment of new pepper gardens and the maintenance of the existing old pepper holdings.

With respect to the establishment and maintenance of pepper gardens, the scheme is classified into two main components, namely:-

- i) Pepper Production Scheme [New Planting]
- ii) Pepper Maintenance Scheme

2. SPECIFIC SELECTION CRITERIA

A genuine pepper gardener who:

- a) Is a member of the nearest PPK;
- b) Has opened a Personal Trading Account with the PPK;
- c) Is to be involved in the production of value-added pepper products;
- d) Has suitable land and sufficient family labour to work in pepper garden.
- e) Is prepared to follow the advice and instructions from DOA.

3. ELIGIBILITY

Minimum : 0.1 hectare/participant

Maximum : 0.2 hectare/participant

4. RATE OF GRANT/LOAN PER HECTARE

Items	Entitlement [RM] Per Hectare			Total [RM]
	1st Year	2nd Year	3rd Year	
Fertilizer	800 (20 bags)	1,200 (30 bags)	1,600 (40 bags)	3,600
Dolomite	480 (40 bags)	240 (20 bags)	240 (20 bags)	960
Pesticide	600	500	500	1,600
Posts	2,400	0	0	2,400
Cuttings	800	0	0	800
Miscellaneous (Tools, Equipment Cover-crops)	590	0	0	590
Operating Cost	20	15	15	50
Total	5,690	1,955	2,355	10,000

Note:

- i) Fertilizer recommendation is based on 500 g/vine in 6 split applications in Year 1, 1 kg/vine in Year 2 and 1.5 kg/vine in 4 split applications in Year 3. However, only 75% of the total fertilizer requirement is supplied under the scheme.
- ii) The above rates are only guidelines. The subsidy should be made as flexible as possible according to the need of the scheme participants provided the issues do not exceed the entitled value for the 3 years.
- iii) 1 bag of the fertilizer weighs 50 kg and 1 bag of Dolomite weighs 50 kg.
- iv) Pepper Maintenance Scheme is RM1,700 per Hectare. It is a 1-Year Scheme meant for the purchase of Fertilizer/Dolomite and Pesticides.

TECHNICAL REQUIREMENTS FOR ESTABLISHMENT/MAINTENANCE

In the First Year:

- i) Fell all trees and undergrowth [for new gardens].
- ii) Burn and remove all left over stumps.
- iii) Mark out planting distance - 1.8 metre in a row and 2.5 metre between rows. Establish cover crop.
- iv) Prepare mounds using top soil and after which mix soil with 15 g Fenamiphos or 50 g carbofuran.
- v) Dig drains surrounding the garden and if necessary, within the garden.
- vi) Mix soil on mound with about 1 kg of dolomite.
- vii) Plant pepper cuttings a week later. The pepper cuttings should be dipped in carbofuran solution overnight (12 hours) before planting.
- viii) Fertilize the vines with about 80-85 gm of the recommended fertilizer at bi-monthly intervals (total amount for 6 applications is 500 grams).
- ix) Apply Fenamiphos or carbofuran at 4-6 months interval.
- x) Remove all flowers appearing in the first year.

In the Second Year:

- i) Continue pruning the vines and removing the flowers.
- ii) Apply about 500 grams of dolomite to each vine 2 weeks before first application of fertilizer. This is to be done once a year.
- iii) Fertilize the vines with about 165-170 grams of the recommended fertilizer per vine at bi-monthly intervals (total amount for 6 applications is 1000 grams).
- iv) Control pests and diseases with emphasis on nematode and velvet blight control.

In the Third Year:

- i) Remove all flowers before applications of dolomite and fertilizer.
- ii) Apply 500 grams of dolomite to each vine 2 weeks before first application of fertilizer.
- iii) Apply about 1.5 kg of the recommended fertilizer per vine in 4 split applications at 3 monthly intervals as follows:-

1st application	500 grams
2nd application	500 grams
3rd application	250 grams
4th application	250 grams

- iv) Continue pest and disease control.