SOCIETY AND THE LAND: CONTEMPORARY IBAN SOCIETY, DEVELOPMENT POLICY, AND THE VALUE OF NATIVE CUSTOMARY RIGHTS LAND IN SARAWAK, MALAYSIA.

TOMOMI MATSUBARA

Kota Samarahan
2003
SOCIETY AND THE LAND:

Contemporary Iban society, development policy, and the value of Native Customary Rights Land in Sarawak, Malaysia.

Tomomi Matsubara

First of all, I would like to thank Professor Michael Leigh, Director of the Institute of East Asian Studies (REAS), for encouraging me to finish writing up this master thesis. It was a very long journey, indeed, due to my unfamiliarity with staying alone in a foreign country and of writing a thesis in English. However, all the time under whatever situation I was, Professor Michael Leigh gave me sound advice on how to cope with the problems I had, and his advice gave me hope and confidence to continue on. Without his supervision, I would definitely not have finished writing this master's thesis. Secondly, I would like to express my appreciation for the kind and warm heart of the Rh. Kenman and his family, who adopted me as their daughter. Although they are aged, they work very hard. They taught me how to make sago, how to cast squirrels and freckle (red ants), and protected me all the time. And during harvesting work with them, I learned what the meaning of strength of being and working together is. Many Citrus from Institute of East Asian Studies and Appreciation Skills (COISAL) in Sarawak shared his countless experiences with the Iban
Acknowledgements

It took me nearly four years to complete this thesis. But they were indescribable years in Sarawak, Malaysia. The one and half years, on and off, that I spent at Rh. Kemarau, engraved the spirit and the daily life of the Iban into my heart. It was completely different experience to learn from the people there than from reading books. At the longhouse there is more humane life and chaotic or complicated emotions and relationships which many academic books fail to let us glance at. Besides my stay at Rh. Kemarau, I travelled around in Sarawak and visited as many longhouses and native settlements as possible to deepen my understanding of their present situations. Different ethnic groups have different characteristics in society and culture, which is the most wonderful aspect of Sarawak.

First of all, I would like to thank Professor Michael Leigh, Director of the Institute of East Asian Studies (IEAS), for encouraging me to finish writing up this master thesis. It was a very long journey, indeed, due to my unfamiliarity with staying alone in a foreign country and of writing a thesis in English. However, all the time under whatever situation I was, Professor Michael Leigh gave me warm advice on how to cope with the problems I had, and his advice gave me hope and confidence to continue on. Without his supervision, I would definitely not have finished writing this master's thesis. Secondly, I would like to express my appreciation for the kindness, courage and warm heart of the Rh. Kemarau community people I lived with. For nearly two years, I have kept visiting them to conduct fieldwork, and in spite of the heavy work I asked them to do with me, they were willing to support me all the time. I got many friends and my adoptive family at Rh. Kemarau, and they taught me invaluable things that I would never have learnt if I had decided to stay in Japan. Especially I would like to say thank you to Remang and his wife, who adopted me as their daughter. Although they are aged, they work very hard. They talked to me in Iban, taught me how to weave mats, how to eat squirrels and kesak (red ants), and protected me all the time from any worries and dangers. Through the harvesting work with them, I learned what the sense of togetherness means and what the strength of being and working together is. Besides, Meng Chuo from Integrated Development for Eco-friendly and Appropriate Lifestyle (IDEAL) in Sarawak shared his countless experiences with the Iban
in Machan area with me and introduced me to the area. Without him my fieldwork at Machan area would not have started nor could it have been carried out so smoothly. In spite of his age and ample and various experiences on the ground, he is always humble to learn and stalwart in objecting to injustice. He has been a source of encouragement and inspiration for me. Tom also accepted my plea to proofread this thesis in spite of his very busy life in Tokyo, and indeed without his cooperation at the final stage of this thesis, I would not have finished it yet. Thank you very much, Tom, for your dedicated work.

Moreover, without the strong support, encouragement and love from my own family and friends, I would not have accomplished my master's thesis. Thank you very much, particularly Pang and Rosalind, for pushing and guiding me so extraordinarily hard in order to help me continue my master's programme. Pang is the only one who urged me so consistently from the start until the end to write up the draft of this thesis, and he never allowed me to throw out this heavy load of achieving my master's degree on the way. Rosalind, as my first and best friend in Sarawak, shared her cheerfulness, intelligence and curiosity, which brightened my life in Kuching. Last but not least, Baku introduced me to Sarawak firstly when we were still 20 years old. He lost his beloved sister on May 4, 2002, and her sudden death confused and agonized many people as a result. A year that passed is definitely not enough to clear our minds and sorrow, but I would like to applaud you from the bottom of my heart as you finally finished your post-graduate study in USA in spite of your great pains and chaos. Well done, Baku, and I am glad that I could meet with you in this large world.

Three years was not such a short period of time for me to stay in Sarawak, and many things happened during those three years. And yet I gained invaluable experiences as a human being and all the Sarawakians whom I met during that time taught me many things. I have encountered with Iban, Kayan and Penan people who have been struggling to improve their lives no matter how hopeless the circumstances they have been placed in are. I hope this thesis will give encouragement to all those tough and yet gentle people to continue their life in whatever way. I devote this thesis to all of my friends in Sarawak and Japan whom I love the most.
Table of Contents

Acknowledgements
Table of Contents
Tables, Figures and Maps
List of Abbreviations

Chapter 1: Introduction

Chapter 2: Context, methodologies and limitations

Chapter 3: Background

3.1. Definition of NCR lands and land categories in Bintan
3.2. Development policy in Bintan

3.3. Context of Komep Baru

3.3.1. Context of Komep Baru
3.3.2. Mechanism of Komep Baru
3.3.3. Controversies regarding Komep Baru

Chapter 4: History of mapping, GPS and GIS

Chapter 5: Economic milieu of Rh. Kemaman

5.1. Economic activities
5.2. Agro-forestry project
5.3. Major economic influences of Komep Baru

5.3.1. Potential price upticks in Kasuwit area
5.3.2. Increased numbers of land disputes

Chapter 6: Economic value of Rh. Kemaman NCR lands

6.1. NCR land features of Rh. Kemaman
6.2. Methodologies
6.3. How much can NCR lands produce?

Chapter 7: Conclusion

At Yokohama, Japan
May 15, 2003
Table of Contents

Acknowledgements ........................................................................................................... ii
Table of Contents ............................................................................................................... v
Tables, figures and maps .................................................................................................... vii

Chapter 1: Introduction ........................................................................................................ 1

Chapter 2: Objectives, methodologies and limitations ...................................................... 5

Chapter 3: Framework ......................................................................................................... 7

Chapter 4: History of mapping, GPS and GIS ................................................................... 23

Chapter 5: Social milieu of Rh. Kemarau ......................................................................... 29

Chapter 6: Economic Milieu of Rh. Kemarau .................................................................. 34

Chapter 7: Economic value of Rh. Kemarau NCR lands .................................................... 48

Chapter 8: Conclusion .......................................................................................................... 69
Table of Contents

Table 3.4: Principal exports—value and percentage distribution, Sarawak

References

Table 6.1: Amount of rice harvested in 2001 and 2002

Annex I: Total NCR lands in Sarawak and sold in 2001

Annex II: Federal government primary export commodities in 1998 and in 1999

Annex III: Agriculture, forestry, manufacturing and construction sectors’ percentage share of GDP from 1995 to 1999

Annex IV: Pepper price in Bintagor and Sibu from 1990 to 2002

Annex V: Resources on Land I, II, III and IIII of Rh. Kemaran NCR lands

Annex VI: Dictionary of vegetables, fruits, natural produce and timber species

Annex VII: Price list of natural produce, vegetables, fruits and timber species

Table 7.1.4.A. The most planted or grown species on the four plots

Table 7.1.4.B. Summary of the values of each plot

Figures

Figure 3.1.4. Total exports—Sarawak

Figure 3.1.5. Three sectors’ percentage share of GDP from 1995 to 1999

Figure 3.1.6. Land of Rh. Kemaran

Figure 7.1.6.A. Pepper trees

Figure 7.1.6.B. Cassava (taro) intercropping with pepper trees

Figure 7.1.6.C. Kapang (chili) intercropping with pepper trees

Maps

Map 1. Rh. Kemaran NCR land map

Map 2. Residence and house location of Rh. Kemaran

Map 3. Cassava farmer’s plots

Map 4. Sibu of Malabo, result of incorrect land survey

vi
Maps except for Map 1 do not have scales due to the flexibility of the dissertation paper size. For the precise scale of maps, please refer to Map 1.
Map 1: Rh. Kemarau & Rh. Gasing NCR lands

This map was prepared with the assistance of Rh. Kemarau and Rh. Gasing community during April to August 2000. The copyright of this map belongs to those two communities. It is advisable to undertake more precise land survey for legal purpose.
Chapter 1. Introduction

The Iban of Sarawak, one of 27 native ethnic groups of the state, traditionally have been carrying out subsistence agriculture. Padi farming, hill padi farming particularly, has been playing a key role in their existence (Hong, 1987: 11 and Freeman, 1992: 152). Their hill padi farming is strongly linked to their customs, adat, and beliefs, as demonstrated by the number of rituals that they hold at the each stage of farming (Freeman, 1992: 154, 205 and 209) and by the fact that the Iban strongly believe in the "padi-cult" (Freeman, 1992: xiv, 153). However, since the late 1980s, they have been suddenly exposed to intensive development projects such as oil palm plantations or fast-growing tree plantations under the development policy implemented by the government. Certainly these rapid development activities have come to restrict their traditional land-use by changing their umai (padi fields) into plantations, and as such, these development schemes have influenced and altered their traditional way of life. And in that process of change, several negative impacts have come out in the form of blockades, deaths, arrests or court cases that involve the Iban in Sarawak. Alteration of land-use due to these development activities has accelerated change in their agricultural system, weakening the influence of adat, which used to be the basis of the agricultural and social life of the Iban. Thus it has resulted in a transformation of Iban society.

The development projects take the form of logging, plantations and dam schemes. In Sarawak, the native people have been protesting against those projects, saying that their forests and lands have been encroached upon and degraded by those projects and that they can not survive without their forests and lands (see IDEAL, 1999: 38-68). The conflict between the natives in Sarawak and the proponents of development projects intensified when the latter took a harsh attitude toward the former. In opposition to the logging, various native communities have been putting up blockades and trying to stop logging operations, which degrade their forests and lives. In response to plantations and dams, native communities have been trying to deliver their grievances to the authorities, alleging that the schemes are threatening and worsening their lifestyle. In both cases, native people who voiced out their grievances were exposed to harassment and arrest by the police (ibid; 36). Furthermore, recently three major cases of conflict have occurred between the state-promoted development schemes and the natives in Sarawak. Firstly, in 1997, a person from a community in the Bakong area was shot to death by the police when he and other villagers were trying to protect their land from an oil palm plantation company (see the detail in ibid; 38). Secondly, in 1999, four workers from an oil palm plantation company lost their lives in the midst of a conflict with the Iban in the Ulu Niah area (BRIMAS, 1999), who tried to protect their land from an oil palm plantation. As a result, an old man from the village was sentenced to 12 years in prison (Saccess, 2001 and Borneo Post, 2001/09/22), although his case is still in dispute in the Court of Appeal as of today. Third in the same year 1999, the Iban from Bintulu division sued a government agency and pulp and paper company as the latter allegedly encroached and destroyed the Native Customary Rights land of the former (personal interview with a resident of Rh Nor, in December 2002). As a result, the community won the case in 2001 (Borneo Post 2001/05/13), and the court ordered the government agency and the pulp and paper company to exclude the land used by the community.

These are the responses of resistance on the ground by the natives of Sarawak, including
the Iban, towards the abrupt development activities. The resistance indicates that the benefits derived from the development activities have not been reaching them, in spite of the fact that these industries producing timber and agricultural products have been contributing to state and national revenue as Chapter 3-2 examines, and that those developments have been introduced with the avowed intention of bringing the natives in Sarawak into the mainstream of development. These phenomena of the resistance movement by the natives are just the appearance of the conflict concerning development in Sarawak and the issue itself is induced primarily by the discord between the market economy and the customary system. It is because rapid development has intensively exposed the customary system, which is represented by the natives' customary law, adat, or their traditional way of life, to a world where the market economy system is the main driving force. And the market economic system has reduced the area under the customary system in native society, in the name of further economic prosperity.

It is the State Government that claimed that the Native Customary Rights lands used by the natives in Sarawak are economically idle and unproductive and that they should be converted into more profitable forms such as oil palm plantations or pulp tree plantations. That is how the State Government has justified taking away the native’s land for their development projects. However, the important thing is not to negate either system, but to bring about concord between the market system and customary system, if not to incorporate the former into the latter. This leads to the question; can the customary way of life of the Iban coexist with the market economy system? To answer this question, this thesis looks into the social and economic environment of an Iban longhouse, Rh. Kemarau, in Machan, Sibu division, that has been under an oil palm plantation scheme. Research on the community’s present social environment will help us to understand how rapid development has affected their traditional society, and research on their present economic situation will lead us to the above question of whether their traditional economic activities, together with their new projects, can coexist with the market economy system.

Chapter 2 elaborates the objectives of this paper and methodologies that the author employed in conducting fieldwork at the longhouse. In addition, it mentions the technical and practical limitations that this paper carries over to further examination in future. Chapter 3 sets the framework for this paper from the aspect of terminology and definitions pertaining to Native Customary Rights Land and development policies implemented in Sarawak, Malaysia. In order to understand the Government claim that the NCR lands are economically idle and unproductive, we need to look into the definition of NCR lands and the context of contemporary development policies in Sarawak. Chapter 3-3 in particular goes into the details of Konsep Baru (The New Concept), which is being introduced into NCR lands by the State Government as a means of land development, because it has greatly influenced the area where Rh Kemarau is located. Chapter 4 covers the history of mapping, the Global Positioning System (GPS) and Geographic Information Systems (GIS). This is in order for the readers to get familiar with the methodology that the author employed and the significance of these technologies in the area of conflict resolution and the empowerment of the natives. Mapping, GPS and GIS are a methodology and technologies that are absolutely needed to scientifically address the issues raised above. The results of my fieldwork are given in Chapters 5 through 7. The results are categorized according to the social (Chapter 5) and economic milieus (Chapter 6) of the community, so that the economic valuation of their NCR lands in Chapter 7 can be understood more clearly and precisely in context. As Freeman (1992: xiii) mentions, we can hardly comprehend “Iban
agriculture and Iban methods of land utilization" without understanding the character of Iban society resulting from the strong interconnection between social and economic activities. Moreover, "Iban agriculture and Iban methods of land utilization" are directly related to the economic valuation of NCR lands that is dealt with in Chapter 7 in this paper. Therefore it is indispensable to explain the characteristics of contemporary Iban society in Chapter 5. Chapter 6, which describes the economic milieu of Rh Kemarau, helps us get a clearer picture of the results of Chapter 7, which attempts an evaluation of Rh Kemarau NCR lands in monetary terms, based on the present economic activities that Rh Kemarau carries out. In order to cope with the present capitalist society, the people of Rh Kemarau have adopted a more diversified approach to agriculture, as presented in Chapter 6, so that they can at least sustain their life economically.

What are the conditions for co-existence of the customary system with the market-oriented world at this moment? If the natives' customary way of life, particularly in terms of their economy, can produce enough profit to sustain their livelihoods and to contribute, however little, to the economy of the nation, the State Government might not need to convert their traditional lands into large-scale, profit-oriented schemes. This was the hypothesis that drove this dissertation paper on a long journey of nearly four years.

The longhouse, Rh Kemarau, was chosen based on three criteria: the first in the geographical region that the longhouse has been undergoing, the second is an administratively small NCR land area and the third is the accessibility of the longhouse from Kuching. As mentioned in Chapter 4, many longhouses in Sarawak are undertaking various community development projects in order to enrich and protect their NCR lands, and agro-forestry projects are among the leading initiatives, along with mapping projects, for rehabilitating land degraded NCR lands. In many communities, agro-forestry projects have played an important role in community development projects in restoring degraded secondary forest and to meet the requirements of local community people (see the case in Thailand in Ilbery, L. A. and Schaffter, E.L., 1986: 44). In Sarawak, agro-forestry projects conducted by Sarawak Forestry Department have been highlighted as a means to recover and enrich such lands that have been degraded by logging and plantation operations. Through agro-forestry activities, the native communities plant various trees and plants using their family lands. The native community’s economic and social needs for the rehabilitation of their degraded forest and native cropland trees for bringing extra cash into the longhouse. In valuing the NCR lands, it was found that a longhouse that had been undertaking an agro-forestry project had a higher economic value of NCR land. If this is so, agro-forestry projects could substantially change the perception of NCR land as idle and unproductive as managed previously by the Sarawak State Government. The second factor is that the agro-forestry projects are a positive indicator of the community members’ commitment towards improving their life through their own development. The third factor is that the
Chapter 2: Objective, Methodology and Limitations

This thesis takes a case study of Rh. Kemarau in Machan, Sibu District, Sarawak, Malaysia, in order to examine firstly the influence of the contemporary development policy in Sarawak on the Iban longhouse and secondly the potential economic value of their Native Customary Rights land under the present circumstances. Through these examinations, this master’s thesis aims firstly to comprehend the transformation of contemporary Iban life exposed to rapid changes in circumstances and secondly to think whether the customary system can co-exist with the present market-oriented economic system.

To enrich the research, a methodology combining social science and computer technology is adopted; interview and observation methods were used to perceive the social influence of the development policy on the longhouse, and GPS and GIS technologies were used to investigate the economic value of the NCR land. The fieldwork was carried out at Rh Kemarau from March 2001 to April 2002, during which all the interviews, observations and a GPS land survey were undertaken. As for the interviews, informal interviews, rather than formal interviews, were chosen in order to extract more accurate and real opinions and feelings from the longhouse residents. As Inoue (1995: 16-18) states, formal interviews can extract only superficial and formal answers from the residents, and often they do not reflect their real situation. To understand the real opinions and situation of the people of Rh. Kemarau, informal interviews were conducted during a period of eleven months after we had got to know each other a little better through working together.

The longhouse, Rh. Kemarau, was chosen based on three criteria; the first is the agro-forestry project that the longhouse has been undertaking, the second is its comparatively small NCR land area and the third is the accessibility of the longhouse from Kuching. As mentioned in Chapter 4, some longhouses in Sarawak are undertaking various community projects nowadays in order to enrich and protect their NCR lands, and agro-forestry projects are among the leading initiatives, along with mapping projects, for rehabilitating their degraded NCR lands. In many countries, agro-forestry projects have gained recognition as community development projects to restore degraded secondary forest and to meet the requirements of local community people (see the case in Thailand in Perry, J. A. and Dixon, R. K., 1986: 44). In Sarawak, agro-forestry projects conducted by native communities themselves have been highlighted as a means to recover and enrich their forests that have been degraded by logging and plantation operations. Through agro-forestry projects, the native communities plant various trees and plants using their existing forest environment: native commercial and fruit trees for the rehabilitation of their original forest and some exotic trees for bringing extra cash into the longhouse. In valuing the NCR lands, I preferred to study a longhouse that had been undertaking an agro-forestry project due to the following three factors; the first factor is the possibility for the agro-forestry project to raise the economic value of NCR land. If this is so, agro-forestry projects could perhaps change the perception of NCR land as idle and unproductive as constantly reiterated by the Sarawak State Government. The second factor is that the agro-forestry project is a positive indicator of the community members’ commitment towards improving their life through their own development. The third factor is that the

---

1 The definition of agroforestry in Sarawak can be broader and ambiguous, too. The activity or the type of plants and trees planted differ considerably, depending on the community.
agro-forestry project can be a clue to comprehend the transformation process of the native community as it would demonstrate the fact that they were driven to maximize use of their customary lands under the pressure of their lands being taken away and the accelerated necessity of earning more cash in order to survive in this capitalistic world. Thus a community carrying out an agro-forestry project was chosen.

As for the scale of the NCR lands to be studied, moderate size was preferred. Although GPS eases much of the land survey work, land surveying is still a tremendously heavy task. Generally the NCR land of each community is quite large, ranging from a few hundred acres to 10 square kilometres. To get the boundary data of so many square kilometres would take months and consume the researcher’s energy. Since the researcher needed to walk along the boundary of the entire NCR lands of Rh. Kemarau by herself in order to control the quality of GPS data, NCR lands extending to so many square kilometres would have been impossible to survey in this case study. Rh. Kemarau’s NCR land is neither too small nor too large (110.42ha or 272.85acre), and is a quite suitable size considering the researcher’s available time and stamina. Furthermore, the researcher needed to go back to Kuching to process the GPS data with PC and to restore her energy. Thus, accessibility was another important issue. As a community meeting all these conditions, Rh. Kemarau was selected finally after nearly a year had passed since the researcher started looking for suitable communities in Sarawak for this project.

GPS was used to survey the boundary of Rh. Kemarau’s NCR land and the land use of one household from April to August 2001. As Chapter 4 articulates, GPS has advantages in terms of the accuracy and legitimacy of its data compared to conventional tools such as measuring tape and compass. Based on this advantage, GPS was used for this project. It is meaningful to conduct a boundary survey for the following three reasons: 1) It is essential to have boundary and area data with considerable accuracy to evaluate the economic value of the land. 2) By conducting the boundary survey with GPS, the geographic relationships between oil palm plantation and NCR lands will be clarified. 3) The compatibility of GPS with GIS makes later analysis easier. Sirait et al. (1994: 411) point out that cadastral maps do not indicate the boundaries of villages in Indonesia. The same is true in Sarawak. Neither have I encountered any research showing the range of land under Iban land tenure with precise geographical position. The precise position of NCL helps not only to understand the general picture of contemporary land tenure of the Iban, but also to understand their social structure from the map. Moreover, as Chapter 3-3 states, Machan area has been targeted for oil palm plantations under the Konsep Baru policy since 1995 and the plantation areas have been interwoven with the NCR areas since then. Few studies have given a clear idea of to what extent the NCR land and oil palm plantations are "co-existing" under the Konsep Baru policy in that area. The survey of Rh. Kemarau’s NCR boundary with GPS revealed such a situation of co-existence in a visual manner. As Sirait et al. insist, it is important for forestry development decision-making to have data of both the land tenure and demography of a community (Sirait et al., 1994: 411), but we can find few such studies in Sarawak. This dissertation paper, by adding the GPS land survey

During the survey, two people of Rh. Gasing community helped us survey Rh. Kemarau’s boundary. In exchange, I surveyed their individual plots following their plea. It is the reason the Map 1 shows several plots belonging to Rh. Gasing. Apart from the deep historical tie between Rh. Kemarau and Rh. Gasing, the popularity of GPS work and the anxiety or uncertainty in the area about their NCR land being taken away inspired them to ask the researcher to do the survey of their plots.
Social research, is likely to contribute to that aspect.

I used a Garmin eTrex and a Garmin GPSII+ receiver to record the position data of NCR boundaries and land use of one household. The GPS points were collected basically every 30 footsteps. To make the map credible, it is necessary to follow a certain standard. For example, the Canadian Ministry of Forests Resources Inventory Branch regulates that GPS static data need to be recorded "for a minimum of 30 seconds with at least 15 individual position fixes during the duration" (Ministry of Forests Resources Inventory Branch for the resources inventory committee, 1998). However, most of the NCR lands of Rh. Kemarau are in a swampy area, which made it difficult for us to walk smoothly while receiving satellite data on the GPS receiver. Moreover, the boundary of the NCR land is not an established footpath, so we always needed to slash bushes, small trees and/or grasses left behind after padi cultivation in order to make a small footpath for ourselves. Under this situation, the "30 seconds rule" stipulated by the Canadian Ministry was of no use and I was compelled to set my own rule to collect credible GPS data in the field. Judging from the assumption that 30 footsteps of my own should be sufficient to make the map precise, I decided on 30 footsteps as my standard to get GPS coordinates. In addition, I used landmark poles or trees as well, wherever I could find them, to collect the data. Customarily Rh. Kemarau residents use natural features such as streams and mountains and specific trees like durian trees, molong and engkabang trees, to clarify their boundaries with neighbouring communities (personal interview with Rh. Kemarau residents in April 2001). Where they cannot find any suitable landmark, they use helian (Borneo iron wood) and rubber trees as an indicator of their boundaries. Following their rules, I used these objects as reference points to obtain GPS point data. This combination of "30 footsteps" and specific objects is an adaptation of what the Canadian Ministry of Forests Resources Inventory Branch stipulates as "dynamic mode and point to point mode" (for detail, refer to the web site, http://www.for.gov.bc.ca/ric/pubs/tevey/opfield/index.htm). To stabilize the satellite signal for high accuracy of points, I stopped at every point for a while to receive data on my GPS receiver. Nonetheless, some places still prevented me from receiving the data due to low altitude, dense forest coverage, and/or valley surrounding the point. To compensate for data failure, aerial photographs should be used in integrating the GPS data in GIS. However, due to the lack of available time and resources, it was impossible to use that method, and instead, estimation was used for this case study.

The methodology of NCR evaluation in economic terms with GIS is examined in detail in Chapter 7.

In various regards as noted above, this dissertation paper has limitations. Technically, GPS causes several kinds of error. We, GPS users, can correct some of the errors by our efforts, but some are beyond our control. The developer of GPS, the U.S. Department of Defence (DoD), can scramble GPS signals anytime necessary. The data error caused by this scrambling is beyond our control. Differential GPS (DGPS) is one of the means to lessen other GPS data errors using two GPS receivers, but I did not use DGPS in this case study's GPS operation because the GPS operation in this dissertation paper is a case study and this paper does not primarily aim at making cartographic maps for public purposes. In spite of

1 Judged from the scale of the map and the minimal number of data failures, estimation made should not influence the map quality a great deal.
1 With DGPS, the error can be minimized to from 5-meter to sub-meter range (Karen Steede-Terry, 2000: 13).
not using DGPS for either real-time or post-processing data correction, the necessary data processing was at least done after data processing with GIS so that the maps in this dissertation paper would be reliable enough for academic purposes.

The second issue is the imperfection and contradiction of the term, "economic value" of NCR land. This dissertation paper examines the economic value of NCR land in Sarawak. What does "economic value" mean? When the economic value is determined only in terms of market value, the economic value of NCR land is substantially zero because NCR land is not allowed to be sold or to be bought (Ngidang, 2000a: 243). NCR land is not open to the market. Besides, as Chapter 3-1 articulates, most of the natives in Sarawak have not been given land title up until today, unless their customary lands are declared as Native Area (in addition to the description in Chapter 3-1 of this paper, see Freeman, 1992: 143, IDEAL, 1999: 22 for details), and they are mere licensees of State land under the contemporary land system (IDEAL, 1999: 22 and Porter 1967: 61 in Hong, 1987: 45). It means the natives in Sarawak cannot utilize their NCR land for their own commercial purposes such as mortgage (Ngidang, 2000b: 39). From this point of view also the economic value of NCR land in the market is zero. However, is market value the only indicator to evaluate NCR land economically? The natives produce food on their NCR land like the Rh. Kemarau residents do. The forest on NCR land produces timber, medicine, and non-timber produce including food. In this regard, the NCR land enables the natives to earn some income by selling such products or to save money by using them instead of buying the same products from the market. Furthermore the State Government compensates the natives for the value of NCR land. When the Government needs to convert their NCR land into development projects, it calculates the amount of compensation based on the number of plants and trees on the NCR land. It suggests NCR land should have economic value in terms of its productivity. Using the latter definition or mechanism of "economic value," this dissertation paper seeks to determine the economic value of NCR land.

This research focuses only on the 9 bilek-families (TR. Kemarau group) of Rh. Kemarau and does not carry out research on the other 5 bilek-families (TR. Rajang group). As Chapter 5-2 examines in more detail, Rh. Kemarau was split into two groups partly due to the oil palm plantation scheme brought under the Konsep Baru policy. It is firstly because the 5 bilek-families of TR. Rajang's group have already opened up their NCR lands and have little land left to harvest and grow agricultural and forest produce for and by themselves. It was unlikely that I would be able to fulfil my main research objective, the economic valuation of NCR land, even if I did research on the NCR lands of TR. Rajang's group. On the contrary, TR. Kemarau's group still maintains its NCR land (although part of the NCR land was either opened up to oil palm plantations after negotiation or taken away for the oil palm plantation due to overlapping claims with others). The TR. Kemarau group harvests and grows agricultural and forest produce in a traditional and value-added way. Secondly it is because the situation of the two groups is already under tension, and the researcher did not want to make the situation worse as a result of her research. This is why I decided to focus on only the 9 bilek-families who did not join the oil palm plantation in this dissertation paper. Due to not conducting research on the TR. Rajang group, this paper might have insufficiencies in some areas. However, as a researcher I should have my own ethics, and I preferred insufficiency to insensitivity.

Last but not least, it should be mentioned here that, generally speaking, the land value
consists of various elements, depending on the society, and the economic value that this paper handles is just one of the many values that the land can have. Iban society has had a deep connection to land in terms of its culture and social structure (Hong, 1987: 14 and Freeman, 1992: 283). Therefore economic value in this paper obviously cannot be the only criterion to know the significance of NCR lands to the native landowners. Nonetheless, this paper focuses only on the economic aspects of NCR lands. I am quite conscious of the Iban's social and cultural bond with land, but exclude these aspects from the main focus of this paper. Firstly it is because the social and cultural value of the NCR land cannot be evaluated in monetary terms nor be quantified, which makes GIS analysis difficult. Secondly it is because it seems that intangible value such as cultural and social value is more difficult to be understood or to be accepted than visible value like economic value in monetary terms. In the future, an analysis of the social and cultural significance of NCR lands should be added to the results of this paper to facilitate a comprehensive understanding of NCR land's significance to the indigenous communities in Sarawak.
Chapter 3: Framework

This chapter sets the framework for further understanding of the context of this paper, in terms of development policies in Sarawak. Contemporary development policies in Sarawak involve land issues, particularly regarding native customary rights (NCR) land. And since this dissertation paper examines the influence of contemporary development policy on a longhouse society and the value of NCR land, I would like to start this chapter by looking into the status of NCR land in the contemporary civil and customary system (Chapter 3-1). As this topic is very profound and associated with various issues, I extracted only those aspects relevant to this dissertation paper in order not to drift away from the intended direction of this paper. Then I will interpret the contemporary development policies in Sarawak in Chapter 3-2, and lastly link them, in Chapter 3-3, to Konsep Baru, one of the specific development policies in Sarawak, which has been introduced on NCR land since 1995.

3-1. Definition of NCR land and land category in Iban

These terms such as law, native, adat, land and land rights “are all loaded with history, preconceptions, and contemporary government policy.” (Hooker, 1999: 28)

Rah. Kemarau claims Native Customary Rights (NCR) to 114.88 ha of land in their vicinity (map 1) and the land is called Native Customary (Rights) Land (NCL), according to the land code in Sarawak, Land (Classification) Ordinance of 1948 and the subsequent 1958 Land Code. The latter established the classifications of all the lands in Sarawak as below:

1. Mixed Zone Land;
2. Native Area Land;
3. Native Customary Land;
4. Reserved Land; and
5. Interior Area Land


NCL is classified as land where the native people can exert their usufruct rights on the land based on their native customary rights and tenure, and these native customary rights are stipulated by the 1958 Land Code to be the rights which “whether communal or otherwise, have lawfully been created prior to the 1st day of January, 1958” (Ambrose Foo Nyuk Kian, 1986: 18 & Hong, 1987: 48). According to the 1958 Land Code, NCR can be acquired through:

a) The felling of virgin jungle and the occupation of the land thereby cleared;
b) The planting of land with fruit trees;
c) The occupation or cultivation of land;
d) The use of land for burial ground or shrine;
e) The use of land of any class for rights of way; or
f) Any other lawful method


After 1st January 1958, the further creation of NCL substantially came to an end (Hong,
1987: 48-49) due to the cessation of further creation of native customary rights on lands. It resulted that only interior areas, which covers all the lands that do not fit into the rest of the above categories (Ambrose Foo Nyuk Kian, 1986: 19 & Hong, 1987: 48-49), had room for additional use by the natives. Furthermore, the native customary lands are usually not given land titles, unless their customary lands are declared as Native Area, thus they are not land owners, but mere land licensees, strictly speaking, in a legal sense. When the 1948 Land Classification Ordinance was amended in 1952, "total proprietorship over all land in the State" (Hong, 1987: 45) came to belong to the Crown and "natives who were in lawful occupation of Native Customary Land were declared to be licensees of Crown Land" (Porter 1967: 61 in Hong, 1987: 45) with this amendment. This amendment made all the lands in Sarawak belong to the State, and as a result the natives were rendered licensees without land titles. According to Hooker, "[i]n Sarawak a person can be said to 'own' land only if there is a Land Office title subsisting in respect of that land. If there is no such title, the land is Crown Land" (Hooker, 1999: 32). NCL lacks land title to this day. Lands are owned by the State, but the native people have customary usufruct on lands where they created and exercise NCR.

The native customary rights are also "stipulated and protected in the community customary law, adat" (Hong, 1987: 14), while the customary rights are ordained in civil law such as the Land Code 1958 as well. Hong (1987) states that the notion of private land ownership does not exist under the adat (ibid: 14) and only communal ownership of land exists. "Under adat the community as a group exercises rights to land. The group controls and regulates the rights and claims among its own members to the extent that each member obtains his or her share of common benefits to be derived from the land." (Idem 1962: 89 in ibid: 38). However, with this regard, Freeman (1992) insists a different opinion. He describes that all the territory under the Iban tenure are privately owned by each bilek-families and there is no collective or communal ownership, though each bilek-families has equal access to some lands (Freeman, 1992: 105-106). The difference should come from the different definitions that Freeman and Hong adopted, judging from the fact that Freeman regarded ownership as only acquirable through felling primary forest (ibid: 105). However, the Iban claims NCR even on the lands where neither did they fell trees nor plant trees as their pemakai menoa (the territory to collect jungle produce and catch fish), and that claim was acknowledged and legitimated by the Kuching High Court through the case of Rh Nor (the detail should be referred to the footnote 28 at page 28 in this paper). Therefore, the substantial difference between Freeman (1992) and Hong (1987) should be deemed as negligible. Therefore, to be more correct, the natives in Sarawak, particularly the Iban, generally deem the collective ownership of a territory that consists of both individual and common usufruct. An individual and his/her family can acquire usufruct over certain land by clearing the forest, and they can maintain the right by cultivation of the land (in such ways as planting fruit trees and/or padi, or occupying the land) (ibid), but the usufruct

5 However the term, "own" for the native licensees, is often used in the media and papers in the form of native "landowners" or native communal "ownership" of the land (see a part of the description in Borneo Post, 2001/4/4, 2000/11/25, Sarawak Tribune, 1998/5/6 and The Star, 2000/4/19). Legally strictly speaking, the natives in Sarawak are licensees and do not own the land with land titles, and in this respect the term "own" is unlikely to be appropriate to use. However, as stated above, the usage of the term "native landowners" is prevalent in Sarawak, and furthermore this paper examines the current status of the natives from the social point of view, not from legal point of view. Therefore this paper uses the term, native "landowners" or native communal "ownership", for its convenience.
right does not constitute “permanent ownership rights” (ibid: 14), although the right can be transferred to generations to come. The right of the person or his/her family will be returned back to the community upon such occasions as when the person passes away, the family moves out of the longhouse to another area or the family has nobody to succeed the land. Thus, actual “ownership” of the entire land within the community territory belongs to the community and individuals are given only usufruct under the supervision of the community, according to adat. In this sense, the entire territory of a community’s NCL does not fall under individual ownership. There are areas where the community as a group possesses absolute rights. It is called communal forest, and the extracted produce from the forest, including the fish from the streams in the communal forest, is supposed to be equally shared among the community members, although in reality those who took part in such collecting or fishing are the ones who shares the yield.

Like other native groups in Sarawak, the Iban have their own rich terminology regarding each type of land use. The entire community territory is called pemakai menoa (also spelt pemakai menua), and pemakai menoa expands “to the extent of half a day’s journey from the longhouse, as well as all the water running through this area” (Richards 1961: Part IV para 10 in ibid: 15). Pemakai menoa includes communal or individual padi plots, gardens and surrounding forest, and streams, burial areas, old longhouse locations and present longhouse locations where communal rights prevail. Padi plots are referred to using many specific terms corresponding to the status of growth of plants after padi cultivation. Because the Iban have been carrying out shifting cultivation and have been rotating their fields every few years for higher production, they fallow the field after a few years’ use, until it regains productivity. A padi field cultivated in the current season is called tanah unai, that used in the last season is called kaka and the land which has been fallow for more than two years is called temuda (personal interview with an officer from Majlis Adat Istiadat in Sarawak in June 2001). In fact, the Iban in Machan area decide how to call the field according to the status of jungle growing on fallow land, rather than years of fallowing (personal interview with Rh. Kemarau community people in April 2000). Gardens are called kebun, and there are kubun getah (rubber garden), kebun buah (fruit garden) and so on. As for the surrounding forest, if the forest is virgin, it is called kampong, and if the forest is isolated, it is called pulau. These kampong or pulau include the streams flowing inside. The burial area is called kubur and the bigger the community is or the longer the history the community has, the more kubur they have within their pemakai menoa. Old longhouse locations are called tembawai. Such rich terminology for various land uses tells us how much attachment and affection the Iban have towards their surroundings and land.

3-2. Development Policy in Sarawak
   Development is a political discourse, and development is not an absolute entity, but means different things to different actors. Development changes its countenance and significance according to the social strata using the term. However, from the social point of view,

6 Freeman (1992: 28-41) describes in much detail about the land system of the Iban, particularly its inheritance system and the relationship between the community and individual rights over the NCR lands. Please refer to him for more details.

7 The judge statement of the court case, Rh. Nor residents VS Borneo Pulp and Paper Sdn Bhd and others, declared by Justice Datuk Ian H.C. Chin in May 2001, examines the broad definition of this terminology and should be referred to. The statement is obtainable from the website, http://www.rengah.c2o.org/news/article.php?id=thest-20000l&subject=9
development should be a process to prepare the entire populace, particularly the social minorities or the vulnerable, to have wider choices for their life, backed up by improved economic and social well being (King, 1996: 8).

The end of World War II was the beginning of developmentalism in the world, and since then every nation, and particularly the so-called Third World, has been driven to make utmost efforts in order to escape being labelled as an underdeveloped country (Gustavo Esteva, 1992: 7). The term, development, in developmentalism was given a specific meaning by the then American President, Truman, when he gave a speech in 1949 on the new world order after World War II. Development started to be used side by side with the term underdevelopment (ibid), and the two became both sides of a coin. Due to this tendency, the term development lost the depth and multifaceted-ness that the term ought to have and it started to be easily manipulated in political discourse. There, development connotes having lots of tall and beautiful buildings, catching up with or inventing advanced technologies, possessing a beautiful house and cars, earning a high salary or spending holidays in foreign resorts with the family. There development is blind to whether to build tall and beautiful buildings, plenty of homeless people were chased away without any mercy, whether to catch up with advanced technologies, some workers get paranoia or insomnia, whether to possess a beautiful house and cars, people are caught with heavy losses or debt, or whether to earn a high salary, the family is sacrificed. Thus, development gained the power to make the underdeveloped nations blind to these issues resulting from development. Therefore, development is easily politicised and made use of by the politicians. Since developmentalism has been so intensive for these 50 years all over the world, two-thirds of the underdeveloped countries have been enchanted and intoxicated with the desire to bring development into their countries (ibid). To bring in development, the sacrifice of various things has been justified. This one-sided approach to development, which is in principle something intangible and can mean different things to different actors, has started to lead the underdeveloped nations into a homogenized society. The spread of developmentalism was also the global challenge to achieve unlimited economic growth. However, it was not until the distortion generated by this challenge started covering our earth with dark clouds of uncertainty in the late 1990s that such a notion of development was forced to come to terms with the world. The world is now facing a new challenge of changing the meaning and direction of development, which started to carry certain kinds of implications and political and economic connotations within itself from the very moment of Truman’s speech.

Such trends concerning developmentalism in the world can be seen even in Sarawak. Contemporary development in Sarawak is a coercive process. In Sarawak, development has been a tool to industrialize and modernize the State and to maintain the political status

---

8 Sachs (1992: 1) states it as follows: “[d]elusion and disappointment, failures and crimes have been the steady companions of development and they tell a common story: it did not work.”
9 Sachs (ed, 1992) examines developmentalism from various perspectives strikingly. The book provides the reader an eye-opening glimpse of the substance of the development.
10 Rural areas have been one of the core targets of development policies in Sarawak due to their less developed economic status compared to urban sectors. As this dissertation paper deals with rural community development, hereinafter “development policy in Sarawak” shall refer only to the rural development policy unless otherwise indicated.
Since Taib Mahmud became Chief Minister in 1981, "participation" of the whole society in development became mandatory in order to industrialize and modernize the State (Kris Jitab and James Ritchie, 1991: 38). And "futurity" came to be used in discourse to enhance such participation (Brosius, 2000: 19-21). Society, particularly rural society due to its further economic backwardness, has been asked to take part in development projects actively in order to modernize people's lives with ample cash. And in order to become an industrialized and modernized nation in the future, every society has been asked to contribute to expanding its economy through people's participation in development. However, we need to pay attention here to the substance of the "participation." This is not participation in the process of decision-making of the development plan, but participation in a determined plan. Authorities determine what development for all is, and the rural society is expected to follow the decision by joining. One is not allowed to make objections to the development plan determined by the authorities. No alternative was substantially acknowledged by the State Government, and when societies tried to suggest alternative plans, they were turned down as "irrational conservatism" or anti-development (for detail, refer to Brosius, 2000: 24). Thus, the participation here is facilitated in an authoritative and coercive way, rather than in a democratic way.

In addition, contemporary development has been used in Sarawak as a tool to maintain the political status quo. According to the 1991 population census, 62.5% of the populace in Sarawak stays in rural areas, and also 49.4% of the total populace of Sarawak are indigenous people. Four towns, Kuching, Sibu, Bintulu and Miri, out of seven urban sectors in all of Sarawak, have an urban population that exceeds the rural population, and 32.9% of all indigenous people reside in these four towns (Department of Statistics, Malaysia (Sarawak branch), 2000). It means the remaining 67.1% of the total indigenous populace in Sarawak are rural residents. Rural indigenous communities have been dependent on agriculture for centuries for their living, and most of them are subsistence farmers rather than commercial farmers (Kris Jitab and James Ritchie, 1991: 36). They have been carrying out shifting cultivation, which requires vast lands for relatively lower volume padi production. Due to these two factors, it has been pointed out that rural areas in Sarawak consist of poor indigenous communities, although they are rich in lands (Songan and Sindang, 2000: 251 and Kris Jitab and James Ritchie, 1991: 36, 48). The lands over which they exert NCR are vast in order to conduct traditional shifting cultivation, and their lands have had deep ties with their cultures and lives (Hong, 1987 and Ngidang 1994 in Songan and Sindang, 2000: 254). However, such cultural and social significance of lands for indigenous communities is not taken into consideration as wealth in the context of the economy. The rural populace, most of whom are indigenous people and subsistence farmers,

11 In this sense, development is a politicised discourse in Sarawak, which is quite different from the previous paradigm of development in Sarawak. For details, refer to Brosius, 2000.

12 Hereinafter, the category "indigenous people" in this paper does not include Malay ethnic group. According to the Malaysian definition of "indigenous people", the category includes Malay, Iban, Bidayuh, Melanau and other native ethnic group (Sarawak consists of 27 ethnic group, Kris Jitab and James Ritchie, 1991: 5). However, as the Malay ethnic group has considerably different culture and lifestyle from other indigenous groups, I exclude the Malay ethnic group from the category and calculation.

13 According to Ngidang (2000c: 34), NCL in Sarawak occupies approximately 13% (about 16,000 square kilometres) of the whole of Sarawak, while in 1986 it constituted 22% (27,379 square kilometres) (Ambrose Foo Nyuk Kian, 1986: 19). For more information, refer to Annex I.
became underdeveloped under the present State Government's way of using the term development, in spite of their cultural and social richness, because they don't have cash. It is exactly the same way of being deemed "underdeveloped" as when the underdeveloped nations were made underdeveloped by the speech of the then American President Truman, as stated earlier. This is why the State Government has been trying to develop the underdeveloped rural area with ample cash. The Government has often mentioned their mission as taking the native communities into the mainstream of development, so that the natives also can enjoy the benefits of development (Ministry of Land Development, Sarawak, 1997: 6). At the same time, development, in return, could serve a rhetorical role in order to maintain the political status quo. The State Government has promised the indigenous communities to bring development into their areas, and the Government has sought votes from the communities during elections as a reward for the development they brought or are going to bring in. Thus, the Government has succeeded in gaining strong support from rural communities in return for bringing development to NCR lands, which has resulted in successful maintenance of the political status quo.

This structure of development in Sarawak, furthermore, has been much more strengthened and justified under the Malaysian Federal structure. "Vision 2020" is an agenda, announced by Prime Minister Mahathir, to upgrade Malaysia into a developed nation by 2020. Sarawak, one of 13 states in Malaysia, is also under this agenda, which requires her to contribute to the Federation through meeting several standards such as earning revenue to increase the GDP, providing sufficient electricity and clean water coverage and spread of information technology.

Development in Sarawak set Western nations as their model for developed nations (Kris Jiab and James Ritchie, 1991: 45), rather than setting their own pertinent model. The Western notion of development means development based on capital, mass production and mass consumption. It pursues economies of scale premised on unlimited growth. What sector is expected to contribute to mass production and ultimate growth of the State? Here are three statistics extracted from the Yearbook of Statistics Sarawak 2000, one table and two graphs to examine the question.