



ILUNRM REPORT

Dissonances in development: Effects on land tenure security in rural Sarawak



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Abstract

The influence of development policies on land tenure and land security in an Iban village in Sarawak, Malaysia is studied. Significant development in terms of infrastructure and commercialization in the area has been a cornerstone of the government's efforts to expand business and lift rural farmers out of poverty. The effects of this policy on a village in Malaysia have been an institutionalization of NCR lands, an increased dependence on market forces, and increased incomes for the villagers. A court case regarding a land tenure dispute is analyzed and the roles of various actors are analyzed and mapped, revealing dissonances in discourse between government and village, as well as a struggle for control of access to land. NCR land is found to be significantly less secure than titled land due to ambiguities in the legal framework. The influences on land tenure in Sarawak are found to be comprised of a complex web of customs, economy, access and rights. Governmental power in this matter can influence all these factors, and communities holding customary land are especially vulnerable in terms of land tenure security.

Keywords: Land tenure, infrastructure, development, institutionalization, Sarawak

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List of abbreviations

SLC	Sarawak Land Code 1958
NCL	Native Customary Land
NCR	Native customary rights
IAL	Interior Area Land
Hilir	Tungkah Manta Hilir
SSI	Semi-structured interview
PRA	Participatory Rural Appraisal
JBL	Jalan Batang Lupar – Sadong road
FA	Flooded area
NFA	Non-flooded area
PTA	Parent Teacher Association
BR1M	Bantuan Rakyat 1Malaysia Government Aid
RM	Ringgit
JKKK	Village Committee
PPWS	Persatuan Perkumpulan Wanita Sarawak (Women group)
YB	Local representative of Sebauyau
DID	Department of Irrigation and Drainage

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1. Introduction

1.1. History of politic and economic context of Sarawak, Malaysia

Malaysia is considered to be a classic “plural society”, one comprised of two or more ethnic groups which “*live side by side, yet without mingling, in one political unit*” (Christian & Furnivall, 1940). The main ethnic divisions in the Bornean state of Sarawak, are comprised of Malay, Chinese and “Dayaks”, the native peoples of Borneo. This diversity plays an important role in the dynamics of the state as one of the cornerstones of political conflicts in relation to indigenous control and access to land and natural resources (Aiken and Leigh, 2003).

In Sarawak, Iban peoples represent 30% of the Dayaks (Ichikawa 2007). Indigenous Iban communities are historically recognized for their mobility as they rely on extensive shifting cultivation for subsistence, fishing, hunting, collection of forest products for consumption, trade, and cash crop cultivation (Wills, 1990). However, as a consequence of commercial development of agricultural land promoted by the Sarawak’s government, traditional agricultural practices in many areas have been shaped towards more intense production systems with the dominance of perennial cash crops (e.g. oil palm, coconut, banana) and the practice of non-farming activities (Cramb and Sujang, 2011).

The Iban peoples recognize a special connection to their ancestral territories and lands (Aiken and Leigh, 2011). However, tensions arise between communities, the state, and private market actors; with the former seeking to protect their lands, and the latter seeking to promote extensive commercial logging and large-scale plantations (Cramb, 2007).

Traditional Iban land tenure and statutory land tenure laws and policies

Traditional Iban land tenure is based on *adat* or native customary rights (NCR). According to native beliefs “*the clearing and cultivation of virgin land confers permanent rights on the original clearer*” (Bulan, 2006). The household is the primary right-holding unit, while the “longhouse community” serves as the primary land administration unit within the community boundaries. The Iban governance and land tenure system consist on a community-based system in which individuals rarely follow a free-riding behavior: they cooperate for the long-term sustainability of the entire community. Membership in the longhouse community grants individual household’s rights of general access to community land and resources (Aiken and Leigh, 2011).

Land tenure dissonances exist between community and state due to a poor understanding and incorporation of the Iban community-based arrangements at the state level. Continuous institutional changes during the Brooke and colonial administrations, and postcolonial governments have shaped Iban territories, sovereignty and rights to land resources (Ngidang, 2005). During the Brooke era, legal pluralism was established by the creation of a land codification system of two different land tenure types, allowing customary tenure to co-exist with the formal system. Private land ownership, strictly referring to the registered land with a document of title, was introduced by leasing “State” land for a period of 999 years with the payment of fees, or by providing grants in perpetuity (Ngidang, 2005).

During the colonial era, major land policy changes took place with the introduction of the Torrens system of land registration, or the establishment of ordinances such as the Land Classification Ordinance 1948 (see Box 1), the 1949 Natural Resources Ordinance or the 1953 Forest Ordinance among others, with the former restricting the area held or exercised by natives; and the last two posing limits to the usage of forestland under the aim of safeguard it for commercial exploitation by the colonial government.

Box 1. Land Classification Ordinance 1948

Five categories of land in the state of Sarawak were established and further recognised in the 1958 Land Code as follows:

- (1) Mixed Land Zone, area in which there are no restrictions on who can gain title to land,
- (2) Native Area Land, area in which title land can be only held by legally defined “natives”,
- (3) Native Customary Land, land subject to native customary rights (NCR) but not held under title,
- (4) Reserved Land, land held by the government, mostly as forests in which shifting cultivation is prohibited, and
- (5) Interior Land Area, a residual category that indeed accounts as state’s land.

Source: Cramb and Willis, 1990.

The 1958 Sarawak Land Code (SLC) supposed the first formalized cut-off point on the legal recognition of natives claim to land in the state of Sarawak. Section 2 (a) defines Native Customary Land (NCL) as “*land where native customary rights have been obtained communally or otherwise according to law before 1st January 1958 and is still legal tender*”. Thus, the status of NCL was preserved independently of the land category it fell in, with the provision of a 99-year lease after the land being surveyed to the holder of customary rights, requiring a rent payment of \$3/acre/year (Cramb, 2007).

Section 5 (2) appears to be crucial for native people since it integrates their cultural practices in the SLC, listing the different methods through which native customary rights can be acquired (see Box 2), yet only under Interior Area Land (IAL) after obtaining a permit from a district officer. Non-full recognition of native customary rights has been given by the SLC. While the State recognizes only the farmland cultivated before 1 January 1958 as NCL, Iban people perceive their communal territories, village forest reserves (*pulau galau*), and farmland as part of their NCL territorial domain. In the light of this, the Government regards any uncultivated land or virgin forests as state land, thus considering land under traditional forest-fallow practices as abandoned or undeveloped in the SLC, thereby belonging to the State (Ngidang, 2005). Large areas of “idle” land across Sarawak has been converted mainly into palm oil plantations (Cramb and Wills, 1990). Further amendments in the SLC have been introduced, posing a threat to the survival of native customary rights (see Box 3; Cramb, 2007).

Box 2. Section 5 (2), SLC

“The methods by which native customary rights may be acquired are”,

- a) The felling of virgin jungle and 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 a burial ground or shrine;*
- e) The use of land of any class for rights of way; or*
- f) Any other lawful method*

Source: Government of Sarawak, 1999

Box 3. Main amendments in the 1958 SLC

- 1996 and 1998 amendments to Section 5 (3) of the SLC allows any NCR to be extinguished at the direction of the Minister by making other land available for the exercise of such rights or by the payment of compensation, *“weather the land over which the customary rights are exercised is required for a public purpose or the extinction of such rights is expedient for the purpose of facilitating alienation”*. The direction is then issued in the Government Gazette and one newspaper, with claimants having 60 days for submitting compensation.
- 1998 amendments to Section 5 (6) allows to *“make rules for the assessment of compensation payable for extinguishment of native customary rights”*, meaning that compensation rates can be reduced at government disposal, as it is reflected in the following statement from the Minister of Land Development: *“the government is concerned that increasing land value and increasing rate for land compensation will hamper development because the government will not be able to pay huge sums in compensation for land needed for the implementation of its development projects”* (Adenan Satem, quoted in IDEAL 1999:31, from Cramb, 2007)
- 1996 and 1998 amendments to Section 5 (7) of SLC states that *“whenever any disputes shall arise as to whether any native customary rights exist or subsists over any State land, it shall be presumed until the contrary is proved, that such State land is free of and not encumbered by any such rights”*
- 2000 amendment to Section 5 (2) of SLC, removed one of the listed methods for acquiring NCR, namely *“(f) any other lawful method”*, implying the no legal recognition of some of the traditional native practices as a lawful method to claim NCL land, as it is the case of using reserve forest land for community purposes within a longhouse territory.

Source: Cramb, 2007.

During the post-war period a more centralised, powerful and modernising state gradually emerged with the vision of transforming Sarawak's rural landscape in the name of development and "*mainstream of modernisation*" (Cramb, 2007). Rather than active agents, native communities have been regarded by the political elite, closely aligned with market/business interests, as obstacles to the process of development due to the complex landownership based on customary law or *adat* (Ngidang, 2005). Iban agriculture has been promoted in a variety of forms, from material and technical support for individual smallholders, schemes, government policies and laws. Institutional changes have become more and more antagonistic to the semi-subsistence Iban and to the community-based governance system (Cramb, 2007). These changes are in line with the fact that the economy of the Sarawak elite indeed "*relies on the control and exploitation of land and timber resources for its power and material advancement*" (Leigh, 2001), with Taib Mahud, the previous Sarawak Chief Minister from 1981-2014, strongly promoting this (Cramb, 2007).

All in all, despite a legacy of certain recognition of customary land rights, territorial strategies have been established to control both, natural resources and the people who use them, as it is examined by Vandergeest and Peluso (1995) through the concept of "territorialisation". As explained by Cramb (2007), the promotion of "*an ethnically-based system of land classification, an exclusive focus on registering individual title, an exclusionary system of forest reservation, and an increasingly restrictive approach to the recognition of customary land*", have allowed the extension of the public land domain at disposal of the government. In light of this, private actors and government can benefit from the wholesale transfer of natural resources, including timber and land (Cramb, 2007).

This paper will study this dissonance by analyzing primary data collected from an Iban village in Sarawak. A Case study of an Iban village exemplifies a long-standing and growing tension in Sarawak, through the interaction of three spheres in which the household unit operates: community, market, and state. The case is viewed as a "*social arena in which an array of local and extra-local actors cooperates and compete, intervene and resist, strategize and negotiate, and thus progressively transform both, the natural and the human landscape in ways that are locally and historically contingent*" (Cramb, 2007).

1.2. Description of Study Site

Primary data has been conducted in the Iban village, Tungkah Manta Hilir (Hilir) located N: 1,54°; E: 110,77°, in the south-eastern part of Sarawak (Figure 1). Roads connects Hilir to larger towns and cities such as Sebang town (45 min. by car) and the capital of Sarawak, Kuching (2 hours). Data collection occurred from the 2nd to the 12th of march 2017.

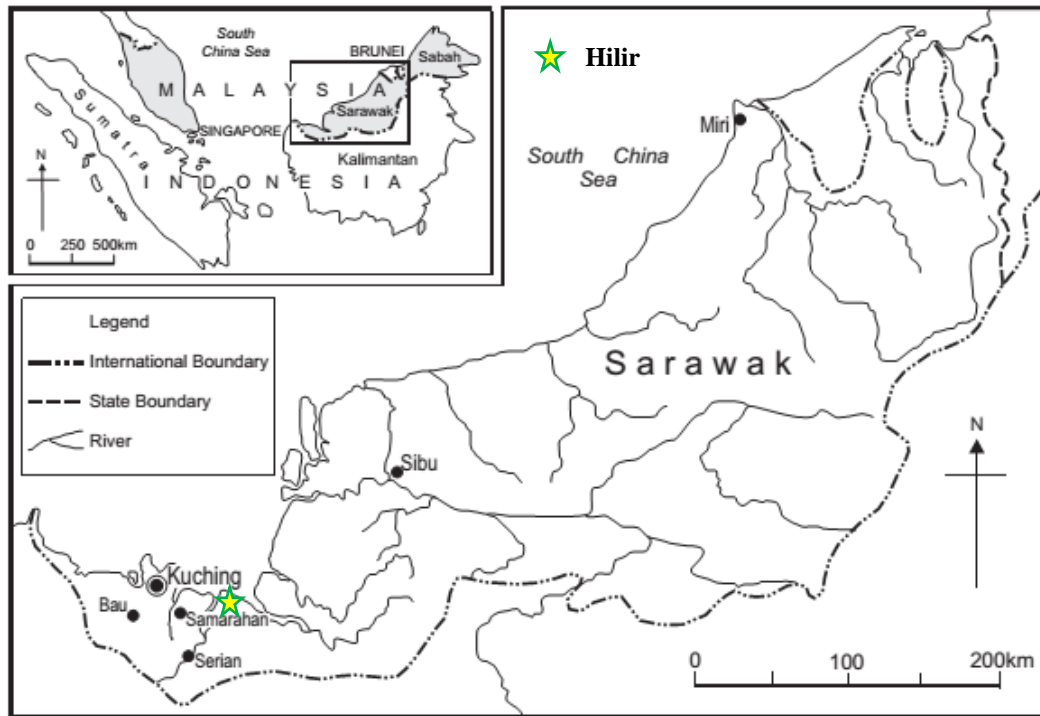


Figure 1. Map of the Malaysian state, Sarawak with the capital, Kuching. Location of Tungkah area is pointed at the South-east end of Sarawak. Figure from (Morrison et al. 2006).

1.3. Research objective and research questions

In light of the above-mentioned circumstances, the principal objective of this study is to investigate how development of infrastructure in the Iban village affect land tenure security and transform livelihood strategies in Hilir. The research is embedded in a clear understanding of the legal framework and policies of the Sarawak government. The following research questions have been identified:

1. How is the land tenure system in Tungkah Manta Hilir?
2. What are the main livelihood activities in which villagers are engaged?
3. What are the implications of infrastructure development in Hilir?
 - 3.1. How does physical access to land influence livelihoods in Tungkah Manta Hilir?
 - 3.2. How is the monetary and non-monetary value of land affected by infrastructure development?
 - 3.3. What is the influence of infrastructure development on villagers' connection to land?

2. Theory of Access

The framework designed by Ribot & Peluso (2003) is used to analyse the "*ability to derive benefits from things*" and to map the relationships that determine this in the study site. Using this theory allows us to understand different power relations that affect the village. The main actors involved are identified and their power relations analysed by mapping the flow of access to land as well as the political conditions that fostered this. We distinguish between:

- *Ability*, which Ribot and Peluso describe as "akin to power"
- *Right*, as benefits from a legalised framework.

Additionally, the interaction between actors who control access and those who maintain access, requiring expending resources to keep an asset available, is analysed and mapped. Actors who gain access do so via those who control it. Finally, the identification of mechanisms of access, which can be rights based or illicit is used to elucidate on the relationship between actor who control, and those who maintain access to land.

3. Methodology

This chapter gives an overview of the different methods applied during the data collection in Hilir and reflects on how the methodological approach has influenced data generation and analyses. As one of the pillars of the ILUNRM course, an interdisciplinary mixed method approach was selected for the conduction of the research. Hence, a combination of social and natural science methods has been applied, with the collection of qualitative and quantitative data to answer the above research questions. The aim was to develop different methods to allow data triangulation, reliability and validity. An overview of the applied methods can be seen in Appendix 1.

3.1. Social science methods

3.1.1. Common questionnaire

A questionnaire was used to collect rapid quantitative data (Casley & Kumar, 1988). A common questionnaire was developed, allowing comparison across five villages in Sarawak. The unit of analysis was on the household level and data was obtained for 19 out of 24 households. Questionnaires were conducted verbally rather than self-administered, which influences the responds. Nonetheless, the research team did not have fully control of the questionnaire design, and accounted its limitations as a fixed-tool. It served as a way to introduce the student-research team in the village and to identify key informants for SSI's and focus groups. In hindsight, a pilot-test could have helped on identifying important drawbacks as it is shown in Appendix 1. (See Appendix 2 for questionnaire form).

3.1.2. Semi-structured interviews

Semi-structured interviews constituted one of the core methods for in-depth investigation and data collection in relation to the main objective and research questions of the study. A variety of themes have been explored (Box. 2.).

Box. 4. Themes for Semi-Structured Interviews

- Land tenure system in Hilir
- Social and political structures within Hilir and outside relationships
- Decision-making processes in Hilir
- Livelihood strategies – Main activities within households
- Impact of physical access on livelihoods and land value through development of infrastructure
- Villagers' connections to NCR land and land security perceptions
- 2009 court case

The open framework of the method permitted us to elaborate on issues raised during the development of the SSI sessions, allowing informants to fully express themselves, hence gathering useful information not always considered while preparing the interview guidelines (Casley & Kumar, 1988). Based on the knowledge obtained during the questionnaires, informal talks and observations, general informants and key informants were selected based on their

knowledge, and unique insight in relevant matters (see Table 2). It is relevant to note that the yields from SSI's, are interviewees' subjectivity, thus being personally biased hence data triangulation appears to be crucial. See Appendix 3 to 7 for SSI guidelines. See appendix 8 for code of informants.

Table 1. General and Key informants for SSI's

General/Key informant	Role in the community	Reason for selection
General informant 1	Elder villager from Tungkah Manta Hilir	Knowledge in traditional Iban customs and laws. Family history and connection to ancestral lands. Knowledge in land use and livelihood changes in Hilir.
General informant 2	Young man from Tungkah Dayak. Met's son, oldest villager from Tungkah Manta	Knowledge on the migration history of Tungkah Manta, relations between villages, and 2009 court case.
Key informant 1	Elder villager from Tungkah Manta Hilir and headman's brother	Knowledge on NCR land and 2009 court case
Key informant 2	Headman of Tungkah Manta Hilir during the last seven years	Knowledge on land configuration in Hilir, decision-making processes and organization, relationships outside Hilir. Soil sampling carried out in one of his plot.
Key informant 3	Headman of Hulu	Involvement in the 2009 court case and relation to NCR land
Key informant 4	Headman of Atas	Involvement in the 2009 court case and relation to NCR land
Key informant 5	Headman of Dayak	Involvement in the 2009 court case and relation to NCR land
Key informant 6	Chairman of PPWS	Knowledge on activities, structure and organization of PPWS. Knowledge on power structures and organization in Hilir.
Key informant 7	JKKK member	Knowledge on power structures, organization and decision-making processes in Hilir
Key informant 8	Teacher at School	Knowledge on aspirations of children attending the school.

3.1.3. GPS mapping

Two GPS walks were conducted during the field study. The first walk was to get familiarized with the physical configuration, and determine the different land uses within the village. The walk was conducted from the tar-sealed road in Hilir to Tungkah Dayak. The second walk covered a two-hour boat trip up-river with four local guides to locate the remote NCR-land “Selabu”. Knowledge on old and current uses, identification of relevant symbols within the area, and tracking of the land area that was cleared by a logging company in 2009, was obtained (see 5. Case Study).

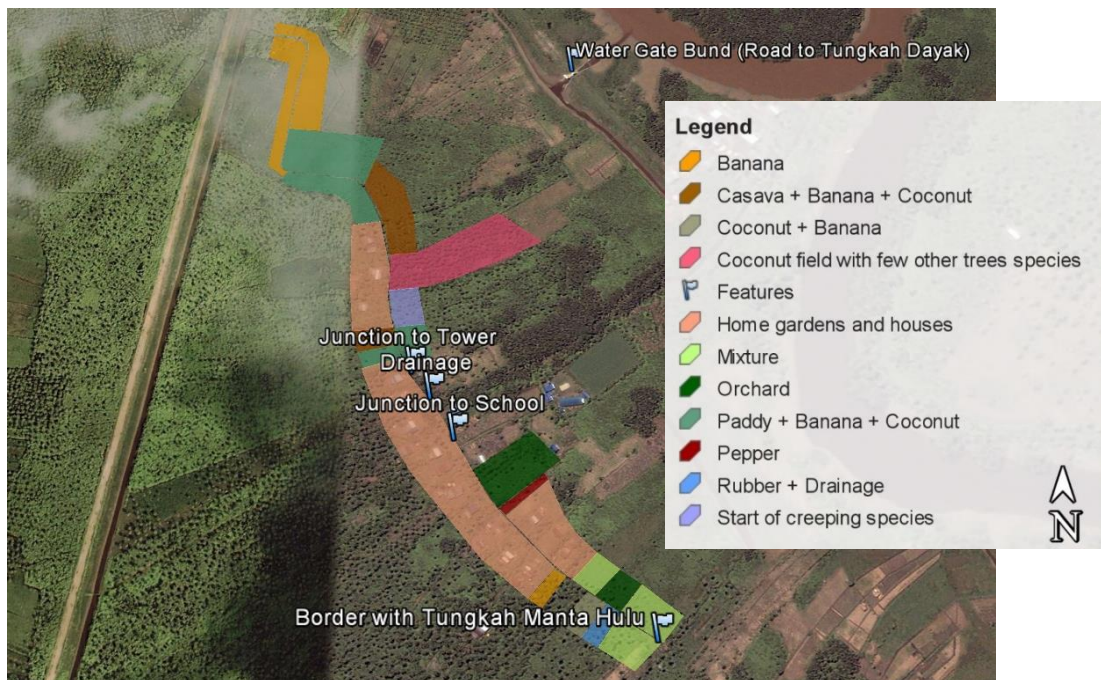


Figure 2. Descriptive map of land uses in Tungkah Manta Hilir. Edited map from google.earth



Figure 3. The map shows the NCR-land in Selabu shared by several communities, amongst them the Tungkah villages. Edited map from google.earth

3.1.4. Participatory Rural Appraisal methods (PRA)

A collection of PRA methods was applied under the aim of obtaining valuable information from villagers through a process in which they present, share, and analyze their knowledge about life and conditions. "*Participatory Rural Appraisal methods are relevant tools for analysis of difference, unequal relationships and prioritization*" (Mikkelsen, 2005).

3.2.4.1. Participatory mapping

Two participatory mapping (see Appendix 9) exercises were conducted with the purpose of identifying the distribution of all households within Hilir. In addition, the sessions pursued the identification of different land tenure types, different land uses and managements. To clarify the boundaries of Hilir a satellite image of the area was provided. Although participants were reluctant to draw the map themselves, the exercise was not very well planned, roles were not assigned, and the number of participants was large, it was a successful activity through which villagers demonstrated to be very active and willing to contribute in the mapping discussion. A transect walk (see Appendix 10) was guided by a villager who provided knowledge of land ownership and species recorded on the walk. Transects are a straight line-registration of an area while participants discuss problems and benefits within the area (Mikkelsen 2005), however due to lack of experience the practiced transect mainly revealed crop cultivation, drainage systems, land ownerships and other plant and trees species within Hilir.

3.2.4.2. Focus group

Focus groups are in-depth group interviews that emphasizes on group dynamics and interactions. According to Mikkelsen (2005) "*focus groups are relevant when the dynamics of the group situations considered to provide additional useful information*". One focus group was conducted to gain knowledge on community experiences and perceptions on "impacts of development of infrastructure". Three villagers from three different households with diverse backgrounds were invited based on information from questionnaires and informal talks. Nonetheless, the total number of participants was six with the addition of two more towards the end. The lack of experience of the researchers and the large group size posed a challenge. It was especially hard to keep the discussion alive, and the whole session resembled a group interview rather than a focus group. However, the outcomes were relevant for the research. See Appendix 11.

3.2.4.3. Seasonal Calendar

A seasonal calendar was conducted in collaboration with a single farmer from Hilir in order to explore the annual dependence on cash and subsistence crops respectively, on household level. The seasonal calendar investigates the labour, fertilizer and herbicide inputs, and further suggests which months the current household would have income fluctuations. The order of questioned factors that is included in the seasonal calendar showed to be crucial in terms of the flow of the session. The order of questions was elaborated while conducting the calendar and the outcome provided knowledge on strategies of management and crop planning throughout years. Basic knowledge on local cultivated crops should be known to the facilitator beforehand to avoid irrelevant or useless questions. See Appendix 12.

3.2.4.4. Venn Diagram

For exploring the organizational and institutional structure of Hilir, a Venn diagram was considered the most suitable method (Mikkelsen 2005). A teacher at the local school was selected as informant, on the expectation that a teacher may know structures, institutions, and villagers while remaining "neutral". The session was initiated by having the informant listing all institutions in Hilir. After this we would ask the informant to size the different institutions in circles, corresponding to their influence. Overlap of circles reveal interactions amongst institutions. The teacher could not be encouraged to draw the circles himself, but was engaged in the formation of the diagram and content with the outcome. However, lack of experience, challenged the exercise and it became clear that preparation is crucial e.g. researchers can list expected institutions prior to the exercise, to prevent missing some during the session. See Appendix 13.

3.2.4.5. Informal talks and Observations

Observations made while conducting data can support and sharpen data synthesis. Informal talks can prove very informative and reveal data that might not be captured during formal data collection. Informal talks can help identify key-informants or gain the trust of informants and enable more in-depth research during the stay at the study site. Additionally, participating in villagers' daily routines can provide knowledge on livelihood matters that would otherwise be unknown.

3.2. Natural Science methods

3.2.1. Soil sampling

The hypothesis for the sampling is that Jalan Batang Lupar – Sadong (JBL), the road functioning as a bund, has increased the agricultural value of soils located east of the road. Changes in the soil factors may induce changes in agricultural practice and price of land. A simple soil sampling based on two composite samples, one from each side of JBL, corresponding to a permanent flooded area (FA) and a non-flooded area (NFA), are analyzed for salinity, pH, %C and %N. In order to allow the comparability of the samples, two fallow plots were selected.

The small number of samples pose a major limitation to the validity and representativeness of the data. However, the analysis is included only to get a notion on whether the natural science based determination of soil fertility can be linked to infrastructure development and villagers' perceptions of soil fertility. In addition, the soil sampling was seen in the overall research objective as an enriching opportunity to learn how to apply different methods in the field.

3.3. What we learnt

3.3.1. *Reflections on methodology*

With little experience on almost the entire selection of methods, the execution of these in the field, was as much a learning process as it was data collection. Evaluations of the different methods has been made at evening meetings during the stay, in order to sharpen the application of them for following sessions. The researchers have discovered how important experience is, in order to do social science in a specific social context e.g. a village like Hilir. The balance between data collection and socializing can be very difficult to maneuver, and can leave the researcher at times very disorientated. Additionally, research on the rather sensitive subject *land tenure* further impose careful data collection in order not to initiate conflicts in the local settings. But also sensitive subjects can be difficult to cover because of interviewees unwillingness to share and because gaining trust can take longer than two weeks. There is also a fine line between when to inform the interviewee on the objectives of the research, and when not to, for obtaining of unbiased data. Respect and understanding for the context that you as a researcher is “visiting” during two weeks, is important and researchers should not forget the study objective of the research.

3.3.2. *Working with a translator*

Lack of experience for researchers working through a translator challenged the research in ways of utilizing the scarce time for data collection in a profitable way. The good collaboration with a translator will establish through mutual understanding, and the translator actually becoming a full member of the research team. The research team discovered that inviting the translators to discussions on findings would increase outcome in later data collection because the translators would be more aware of the scope of the research. Translators should not only be translating between two languages, but as well understand what is being asked, with what intentions, and have to maneuver in the customs of the interviewee which is alone a great task. Additionally, the translators were new to the field and also developed their skills throughout the study, so that closer to the end of the stay at the study site, more valuable data could be obtained more efficiently

4. Results

4.1. General description of Hilir

19 out of 24 households were captured in the questionnaire. The average age of the respondents in the questionnaire is 54 and a generational gap was observed, with hardly any people in the mid-twenties-thirties. On average three people are dependents in each household and 14 households have a member who have migrated. Farming of coconuts and banana is the main activity and a number of rather new concrete houses in the village establish a sense of "economic" growth. The village is supplied with 24-hours electricity and is dependent on rain water. From May 2017, it is anticipated that running water will be supplied via pipes from Sebang town.

4.2. Reconstructing the history of Tungkah area

The history of the Iban settlement can be traced back to the 1700's (figure 4). Maringkong, a forested area located up Sebang river appears to be the original ancestral area of all Tungkah villages. Most likely due to war, Iban people migrated and resettled in Selabu, the current NCR land belonging to all Tungkah villages. Supposedly in the 1920's, resettlement happened again further down stream at what is now, Tungkah Dayak. Several reasons for this resettlement have been revealed ranging from expansion of agricultural area for rubber-cultivation, attack of headhunters to a curse in Selabu that forced villagers to migrate. After few years, Tungkah Dayak peacefully divided into three other villages corresponding to the four current related Tungkah villages: Dayak, Hulu, Atas and Hilir. Initially all villages were under the Dayak headman's administration, however, now formally recognized as independent and separated kampongs, each village has its own headman. On Appendix 14, a family tree is shown.

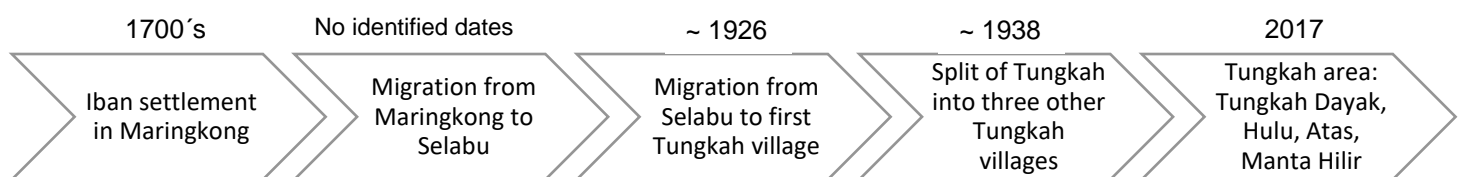


Figure 4. A timeline representing the main migration episodes was created based on elders' statements and life experiences

Box 4. Beliefs and the curse in Selabu

Animism constitutes an important component of traditional Iban culture and religion. The practice of rituals, use of talismans, beliefs on taboos and curses used to be common in the past. Although most Iban people have converted to Christianity, traditional beliefs remain an important part of the community ideology and identity. The migration from Selabu to Tungkah Dayak, explained by elders in Hilir on the basis of family stories, was motivated due to the existence of a curse in Selabu initiated by the breakage of a taboo. According to local legend, a grandmother and her grandchild used to live far from the longhouse in Selabu so that villagers did not take care of them, remaining isolated and excluded. One night, the woman took a frog and put clothes on it. The frog was sent to the longhouse causing a burst of laughter among villagers. Consequently, Iban spirits punished the villagers by throwing a heavy storm through which the entire longhouse turned into stone. Survivals migrated down river and resettled in Tungkah Dayak. The curse launched by the spirits did not affect land and crops, so villagers could still visit Selabu for cultivation purposes, as it is the common practice today during the fruit season.

4.3. Livelihood strategies in Hilir

Income generating activities in Hilir involve farming, off-farm work and to the lesser extent, collection of NTFP (Figure 5). Hilir villagers depend heavily governmental subsidies, both for being "*ekasik*" (rural poor, for which villagers obtain BR1M), and to support farming via crop schemes. Subsistence activities include hunting in NCR land, fishing and the cultivation of homegardens.

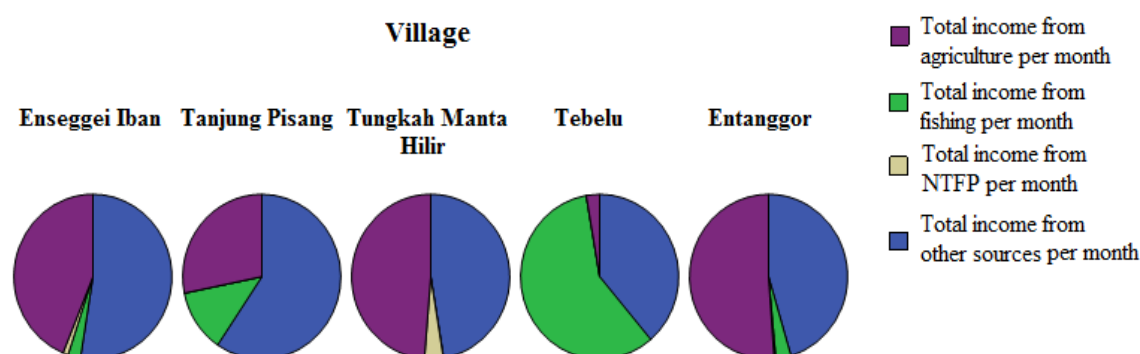


Figure 5. Income sources as sums (in RM) for the five villages surveyed in the questionnaire. The "other sources" category is dominated by welfare programmes such as BR1M in the case of Tungkah Manta Hilir

Income generating activities

Farming is the main activity in Hilir and constitutes an important source of income (figure 6). 19 households cultivate banana and 17 households cultivate coconut which are the two main cash crops. Bananas are collected every second week and exported to Kuching by a villager, member of PTA functioning as a middleman, since the former banana-middleman underpriced the product.

Access to seeds, fertilizer and herbicides cannot be described generally for the villages, as different strategies are applied. Cultivated crops are either on a scheme, typically banana or introduced independently by each household e.g. coconut. Historically pepper has not been productive in the area. However, it has been reintroduced in several households and seems to thrive now. A cocoa scheme has been introduced in six households and one household already harvests ~20-30 kg.

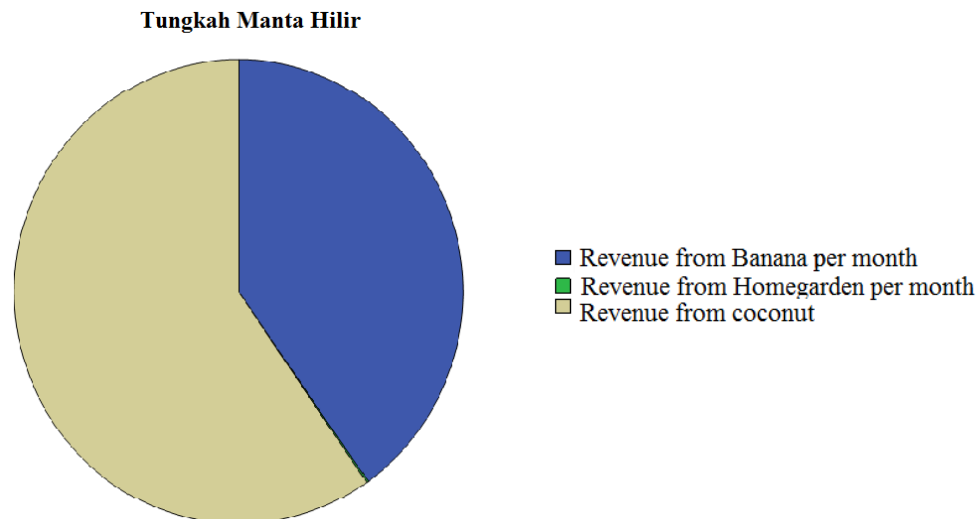


Figure 6. *Incomes as sums (RM) from cash crops in Hilir*

Additionally, education, work, or search for new land can induce migration of household members in Hilir, with 14 households having a member who have migrated. Education seems to be significant. Young people with low level of studies generally stay in Hilir. Villagers seemed positive towards the young generation out-migrating to cities and encouraged youngsters to learn English, due to a perception of a better life with a university degree, than a rural farmer life. Additionally, education, work, or search for new land can induce migration of household members in Hilir, with 14 households having a member who have migrated. Education seems to be significant. Young people with low level of studies generally stay in Hilir. Villagers seemed positive towards the young generation out-migrating to cities and encouraged youngsters to learn English, due to a perception of a better life with a university degree, than a rural farmer life.

4.4. Land tenure system in Hilir

There are two different land types within Hilir's territory. Land within the house vicinity is mostly title land held by individual villagers. A large area of land under NCR status is held by the community in Selabu. Patches of NCR land are also found in the village area on both sides of the JBL, with NCR land on the west side currently under the process of becoming title land. While agricultural activities are mostly carried out on title land, the NCR land in Selabu is perceived by villagers as "*pulau galau*" (forest reserve). Figure 7 shows that Hilir has the most titled land out of the surveyed villages.

Land ownership is well understood within Hilir, with no conflicts in this matter. Iron pecks, drainage channels, and communication are common strategies used to demarcate plots among landowners. Trees such as rubber and durian are used to demarcate plots within NCR land (SSI's, focus group, informal talks, transect walk), as well as between villages, with a rubber tree demarcating the boundary between Hilir and neighbouring Hulu.

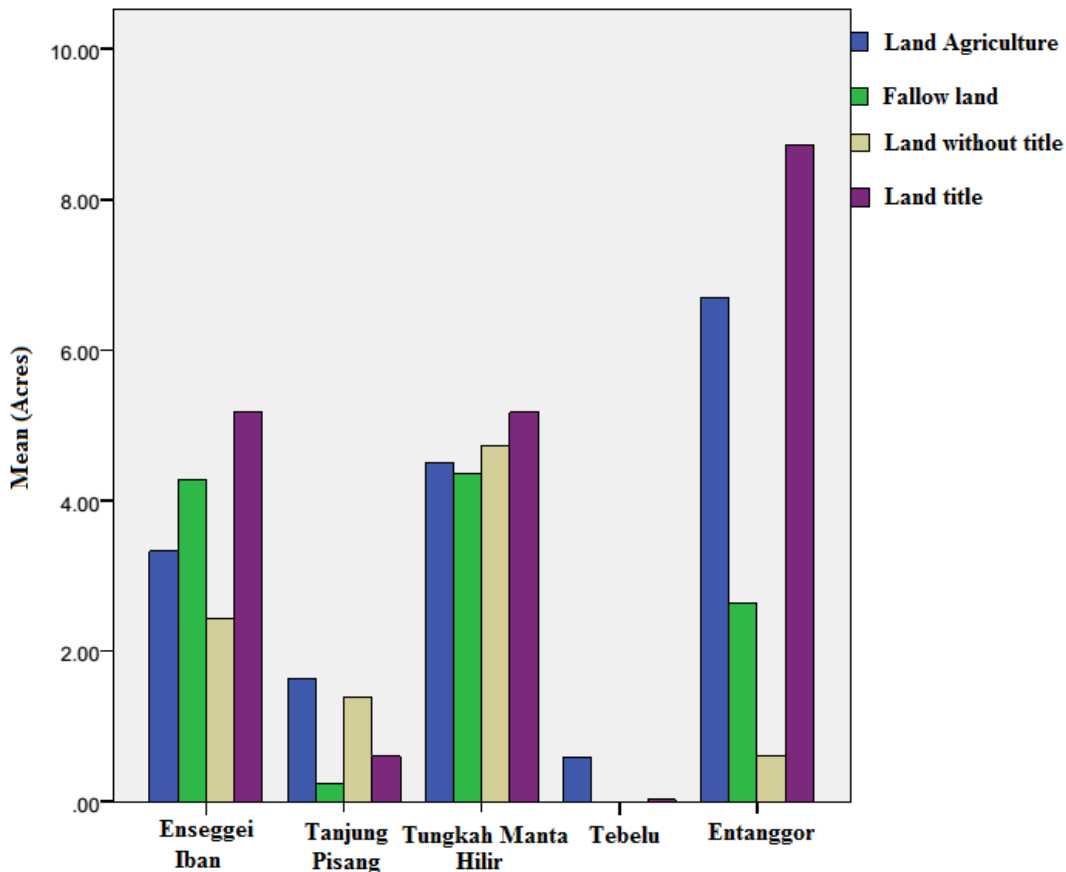


Figure 7. Land types for all surveyed villages. From SPSS analysis

Access to land in Hilir is mainly by inheritance from parents to their sons/daughters, with more land usually given to the one taking care of them. However, the inheritance of land can be a long process if there are disputes between siblings. Despite the purchase of land being limited to Dayak ethnic groups and Malays, private agreements for the lease of lands are sometimes agreed illegally, as is the case between a Hilir villager and an unidentified Chinese buyer.

Two different plot-demarcating maps, from before and after the arrival of infrastructure in Hilir, were shown by two villagers. Differences on numeration of plots were found. However, the findings confirmed that titles existed before the bund was built, as it was stated in a focus group. Through SSI's with different informants, four land title documents were discovered to be Governmental leases. One villager holds a 99-year lease from 1967 (Plot 706, figure 9), while another document was an Occupation Ticket for agricultural purposes from the colonial era, with four different renewal dates. Another villager holds a 60-year lease expiring in 2055, and a permanent title, shared with three other villagers (Plot 247 L.11489, figure 9). A third villager explained his father's problematic inheritance from his grandfather, a process that took almost

three years with payment of fees, yet he is still not in possession of the document. However, villagers perceive land titles to be life-lasting, since leases always have been renewed through the past three generations by the Land and Survey Department. Appendix 15 shows different title documents.

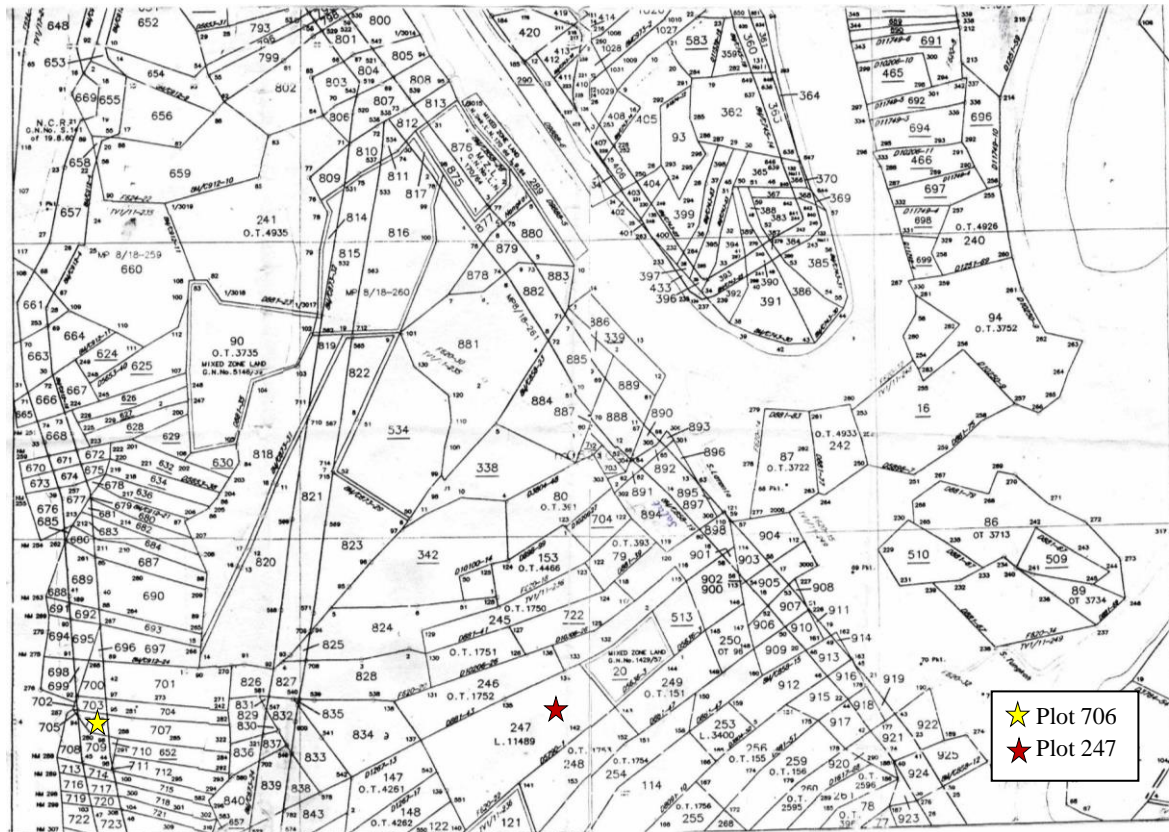


Figure 8. Map showing demarcation of plots in Hilir after arrival of infrastructure provided by one villager



Figure 9. Photo of Hilir land titles applied to google.earth showing the fit between the two maps.

4.5. Decision making and community in Hilir

The overriding spirit observed in Hilir is one of unity and cohesiveness, with the headman playing an important role. Despite not being official, he is treated as official by the government in practice and being unrecognized is not regarded as out of the ordinary by the villagers. Relations with the District Officer are accordingly non-problematic. Proposals from the government such as schemes and more generally from outside the village are transmitted through him and are discussed with the village committee (JKKK), before being shared with the village. The primary roles of the JKKK, which is unofficial due to their contingency on the recognition of the headman, are to discuss the afore mentioned proposals and to oversee social matters such as helping to apply for government welfare (BR1M). Other organizations such as the PPWS bring women together around activities in order to increase incomes. Members of the PPWS apply for funding and propose activities directly to the YB, although they usually consult the headman beforehand.

Additionally, the PPWS helps to solidify relationships in the village, with at least one woman per household being a member, and the chairwoman claiming that it has helped increase the sense of community amongst the members. Despite this, the PPWS has no decision-making capabilities in theory, although the individuals have significant sway in practice. Thus, two groups emerge in decision making processes, the headman along with the JKKK, and the rest of the village.

4.6. Implications of development of infrastructure

The infrastructure in Hilir and the vicinity has remarkably changed during the past 17 years. The DID has been responsible for providing infrastructure within the Sebuyau area. Due to its proximity and enclosure between Sadong and Sebangau river, flooding was one of the main problems in Hilir during a long period. Physical access to Hilir was constrained by the absence of roads, and villagers were limited to walk or transport by boat through the adjacent rivers. Access and water management improvements have been created with the construction of the main road JBL finished in 1999-2000 which also incorporates a bund supported by watergates that allow collection and discharge of water during rain episodes.

4.6.1 Effect of infrastructure development on livelihoods strategies

Prior to the construction of the bunds, livelihood strategies among Tungkah villagers were very limited. The soils were poor, muddy and proper cultivation of crops was challenging. Villagers who stayed in Hilir were forced to cultivate land in Selabu as well as make the most of their poor soils, which provided low yields of banana and coconut. One villager stated, *"I was crying while collecting small coconuts, in mud up to my knees"*. A common practice among those who stayed was to catch crabs, as one farmer stated *"crabs were found everywhere in the village, even close to the houses, and sometimes it was possible to trap 5 Kg per day"*. Cultivation of paddy rice could be on land located in a distance from Hilir, where soils were not waterlogged. Families who had inherited land outside Hilir or who had relatives living in other villages could take advantage of cultivating land somewhere else while staying in Hilir. However, this was a time-consuming strategy due to lack of road access. Most villagers travelled by boat to Selabu with the travel frequency depending on the season (planting, maturity, or harvesting). The good quality of the Selabu soil permitted cultivation of pepper in the hills, paddy on the lowlands, rubber trees, and

fruit trees. The farming practice was more subsistence-oriented than market-oriented. In contrast to the above-mentioned, other villagers migrated. According to six women, the village was notably more empty and quiet, less than 20 households remained in Hilir at that time. A young woman emphasized that *“it was difficult to grow up in Hilir”*.

4.6.2. *Effect of infrastructure development on access to market*

Road access to Hilir has had a major impact on farmers' abilities to access markets. Before the road, export to Kuching by boat could be almost an entire day from Sebang village, hence hindering the marketing of products. However, as stated by one farmer (seasonal calendar), stability of income in the present day highly depends on middle men and market forces, e.g. there is no income for bananas during Ramadan, as Sebuyau is mostly Muslim.

4.6.3. *Effect of infrastructure development on value of land*

Improvements of infrastructure have triggered significant changes on the actual value of land in Hilir. In regard to the monetary value of land, although most of the interviewed landowners were not aware of the current price of their plots, it was largely expressed that certainly *“has the value of land increased with the construction of the bund and road”*. Only one farmer could give a monetary value, clearly stating that land-price changes are due development of infrastructure. *“A land plot of 10 to 12 feet costs 5000 RM today, while its price before the bund and road was around 600 RM”*. One farmer provided information on the compensation received for affected land due to the construction of the road. Based on size of the area and tree species affected, 11.000 RM were given for two acres.

Farmers have also expressed that the value of land for agricultural purposes has increased, allowing cultivation of the current crops, and salt intolerant species such as cocoa. Villagers believe there is potential in the NCR land west to JBL, since they expect the construction of an additional bund which may increase the agricultural value. E.g. the Headman has received an offer on his land, but he declined and expressed good faith in the future.

Soil sampling analysis (see table 2) support these statements. In terms of the effect of JBL on soil quality, soil sampling reveals that salinity is much lower in the NFA compared to the FA (Table 2). However slightly saline soils are characterized by an electrical conductivity of 2-4 mS, so salinity may not be a severe stress factor (Schjørring, 2016). A low pH level in the NFA could be explained by the production of humic acids in the A-horizon. The NFA has a higher soil %N than the FA, however both soils have a good level of %N which is >0.1% (Doran & Jones 1996). In terms of %C the NFA has a very high content which could be due high litter input and low pH preventing decomposition (JVP Kompendium 2014). Both NFA and FA could be characterized as "good soils" by this simple analysis. FA was completely waterlogged, and by the mere eyes the agricultural value of FA is poor, regardless of the values obtained. See appendix 16 for more in detailed information.

Table 2. Soil sampling results

Measurements	Flooded area (FA)	Non-flooded area (NFA)
Ph	6.48	4.14
Salinity	0.969 mS	0.076 mS
% N	0.29	0.9
% C	3.35	18.07
Texture	Silty clay (ZC)	Silty clay loam (ZCL)
Colour	25Y 3/2 (very dark greyish brown soil)	10 YR 2/1 (black soil)

4.6.4. Effect of infrastructure development on NCR land

As was often expressed (SSI's, focus group), infrastructural improvements have consequently influenced villagers' connection to Selabu in the sense that it is less visited and maintained. Nowadays, most of the villagers in Hilir only go to Selabu during the fruiting season (December to January). However, villagers have expressed feeling a strong ancestral attachment to their NCR land. "Sayau katanau" was mentioned by one villager as a way to express her "love for the land". Selling the land in Selabu is not a considered option to even if a company proposes a good deal to the community. All interviewed villagers have clearly stated they want to keep the land as "pulau galau", and pass it on to their children. Villagers have stated they might consider to use the land again if road access is developed.

5. Case Study: The right to land

“Most people think that all land is NCR land, but it is not like that.”
(District Officer for Sebuyau)

Ten years after the bund was built, a logging company was granted a license to start extracting timber from Selabu, inflicting a shock on the community's land assets. The extent of the company's operations into Selabu can be seen in figure 2. A timeline of the events that followed is detailed in Table 3. All quotes included in this section were obtained via SSI's.

Table 3. Timeline of the main events in relation to the 2009 court case, constructed using data from SSIs with key informants and villagers and triangulated using newspaper articles (Tawie 2011a; Tawie 2011b; Tawie 2011c; Tawie 2011d; Tawie 2011e; Sarawak Report 2010; Sarawak Report 2012) and court documents. Data from court documents appended with an * (Rhodzariah 2011)

Date	Event
30.09.2009	Quality Concrete Holdings (QC) get issued a conditional year-long Occupation Certificate to log timber, under section B of the Forest Ordinance. Licence to take forest produce under sections 49 and 51 of the Forest Ordinance*
11.07.2010	Headman of Kampong Ensika discovers encroachment and relays information to surrounding villages
13.08.2010	Forestry Department directs QC to “suspend activities”
25.09.2010 (estimate based on newspaper articles)	Attempt at compensation to affected families for 250RM through Deed of Settlement, with Penghulu Merum Ak Babu as witness*
14.10.2010	Blockade against companies by villagers begins*
18.10.2010	Fire damages QC property in logging camp
22.10.2010	Numpang, Nicholas Mujah and several headmen of villages involved in blockade arrested by police*
25.10.2010	Numpang and co. released on police bail of RM100
1.11.2010	Numpang and others file suit against QC, Loyal Billion SDN BHD (LB), Penghulu Merum Ak Babu. Suit number: 22-218-2010-II*
30.11.2010	QC timber licence expires*
Late December 2010	QC timber licence renewed*
18.01.2011	Ex-parte interim injunction ordered against Quality Concrete Holdings*
07.03.2011	Further interim injunction against timber companies ordered by Kuching High Court Judicial Commissioner Puan Rhodzariah bt. Bujang*

09.03.2011	Case heard against Numpang at Simunjan district court for criminal intimidation
10.03.2011	Numpang Acquitted: prosecution failed to put up a prima facie case against him
08.08 – 19.08.2011	Hearing for Numpang and others' lawsuit against QC and LB
08.11 – 11.11.2011	Second hearing
19.12 – 23.12.2011	Third Hearing
21.05.2012	High Court of Kuching declares that Iban villages have native customary rights over disputed land

"We were fighting a big company"

Key informant of Hilir, 2017

Conflicts over land can divide villages when decisions are made without consulting the affected land owners (Andersen et al. 2016). In October of 2010, when the people of Hilir and other surrounding villages, rallying behind a local activist, decided to mount a blockade (see Table 3 for timeline), tensions were evident within and between villages. According to one of the members involved, people took bribes of 250RM, with at least one headman encouraging the acquiescence (court papers corroborate this but identify these as “compensation” through a Deed of Settlement). People who voiced support for selling the land (or accepting “compensation”) to the company were seen as opponents at the time. Tensions were aggravated due to the perception of insecurity of the NCR land, with many believing they were fighting an uphill battle against a powerful company (see table 4). It is evident from speaking to the villagers of Hilir that a sense of desperation prevailed due to this fact.

"All we could do was support the headman in every decision."

Member of PPWS of Hilir, 2017

The conflicts described were overcome by the bringing together of the majority of headmen, and subsequently the majority of the villagers, including migrated villagers who returned to support. SSIs and focus groups revealed that insecurity of the land in the midst of the case meant that many villagers unified behind central figures of authority (headmen or activists) in order to present a solid coalition of villages to challenge the company. It is understood that this unification in the midst of a tense social environment significantly increased the ability to do so. Following the success of the villagers in the courts, an attitude of “moving-on” was adopted regarding the villagers who were seen as “opponents” during the court case. This clemency enabled the unity of the village to solidify and maintain itself in a similar vein to what was established during the court case, revolving around the headman, reminiscent of the “cool” state of the longhouse of traditional well-functioning Iban communities (Cramb 2007, p59). Therefore, the court case had the effect of increasing social capital and the village, with this increased cohesiveness being expressed repeatedly by villagers.

Table 4. Stakeholders affected by the court case

Stakeholder	Stake	Role(s)	Description
Villages (inc. Tungkah Manta Hilir)	Access to land, livelihood	Victims of encroachment, Plaintiffs in second case	Selabu
Loyal Billion Sdn Bhd	Timber goods acquisition.	Original plaintiff, contractor to Quality Concrete, Defendant in lawsuit	Logging company
Quality Concrete Holdings Bhd	Contract affected	Original plaintiff, Contracted by Loyal Billion, Defendant in lawsuit	Contractor to logging company
Director of Forestry Department of Sarawak	Outcome of case, granted lease, Development ambitions	Approved licence for Quality Concrete Holdings Bhd, Defendant in lawsuit	
Penghulu Merum ak Babu	Development ambitions	Defendant in second case, witness to Deed of Settlement.	High ranking official for the region.
Activist	Access to land	Organised resistance, unified villages in the area, Charged with criminal intimidation	Activist, victim of encroachment
Raziah	Share value	Applied for Logging licence.	Sister to Chief Minister of Sarawak, Shareholder
State government	Development ambitions	Defendant in lawsuit	State government of the Malaysian federation.
SADIA (Sarawak Dayak Iban Association)	No direct stake.	Raised funds for case against encroachers, lodged village members at HQ during case.	Non-Governmental organisation,

In 2012, by the end of the court case which pitted governmental departments, private companies and the Penghulu against the villagers affected by the encroachment (see Table 3 and Table 4 for case timeline and stakeholders respectively), there were 200 court cases pending for similar disputes (SACCESS 2012). Understood from the vantage point of the villagers of Hilir during the court case, this demonstrates a climate of government sponsored marketization which has little regard for native rights. Awareness of these motivations since the court case has increased the security of Selabu, as the village holds increased financial capital from compensation from the companies, which has been set aside to fight any future encroachments and the court case outcome itself serves to legalize control over the land. Additionally, people from other affected villages have started to apply for this land to be recognized as titled land. Villagers from Hilir were of the almost unanimous opinion that they would not relinquish their land under any circumstances, preferring it to stay as “*Pulau Galau*”. Their stance came mostly from a feeling of ancestral connection and a discourse of rights. Despite this, some people in other villages seemed more willing to consider potential government development schemes, although mentioning that this should be contingent upon a common consensus between the villages involved. The main outcomes on the community of the court case has been to increase access to knowledge through experience and increase solidarity or social capital (Ellis 2000).

6. Discussion

As mentioned in the introduction, the State Government during the last decades has been driven by the desire to promote modernisation with “*well intention concerns to eradicate rural poverty*” (Cramb, 2007). Thus, the development ambitions of the government have had significant implications for villagers.

6.1. The effect of increased access

Improvements of infrastructure have notably increased the ability of villagers to benefit from their land, mostly from title land close to their residential area. Prior to the arrival of the road and bund, villagers’ mechanisms of access did not operate in a sequential manner, namely the right to land was not complemented by the ability to benefit from it. However, development in the Tungkah area has brought a new alignment in this matter by increasing physical access to land and better usage, which in turn have generated a shift of attention from Selabu to the surrounding Hilir area among villagers, with the former being disregarded for cultivation purposes. With this shift, due to increased access to titled land, came a concurrent move from more subsistence agriculture towards high value and lower labor-demanding crops such as banana, coconut, pepper, or cocoa indicating an increased focus on marketable goods with increased access to market. With the bund having a clear positive effect on the area of land that is protected, not only in terms of reduced flooding and salinity, but in better soil properties for crop cultivation (4.5.4. *Soil sampling*), the agricultural value of land has augmented, allowing farmers to improve their ability to maintain livelihoods. Regarding, these agricultural achievements in Hilir, the State Government has increased its “development capacity”, meaning its ability to introduce schemes and marketize villages, thus “controlling” the selection of cash crops among farmers by their enrollment in schemes, as is the case of banana or the new cocoa scheme introduced recently in Hilir. Whereas villages can certainly gain access to capital and knowledge, this poses a risk on the level of dependency on a market-oriented economy which is highly subsidized. This dependency is not only market based, as mentioned in section 4.2, with government welfare having a major role in livelihoods.

6.2. Commercialization

As mentioned in section 4.5.3, increased access in terms of ability to benefit, increases the monetary value of land, notably the title land adjacent to Hilir. Taking into account the agricultural achievements in lands previously being poor and flooded, expected future drainage of the flooded land west of JBL could be enacted, as is the case in other nearby villages such as Enseggei Iban, where former flooded land is now drained and highly agriculturally valued due to mineral deposition from the Sadong river. The uncertainty over these flooded lands brings different actors together, with outsiders bringing offers to purchase land, insiders applying for issuing NCR flooded land to title lands, and ultimately, the government playing an essential role in the control of access to this resource, from which current landowners cannot benefit.

The expansion of market opportunities in Hilir through better connections to cities, relations with middle men, and better produces, have induced a rapid commercialization of the farming system. In relation to the analyses of Hla Mynt (1958; 1973) on transitions to the money economy, farmers’ economy in Hilir appear to correspond with the second stage of commercialization; with greater development of market infrastructure and the surplus capacity (in terms of land and labor-

time) being utilized, households start specializing and expanding their commercial production by compromising the subsistence output. Despite higher incomes, risks due to dependency on market forces are also higher.

6.3. The power in development

This increased commercialization results in government essentially determining market values of land as access to that land is increased. This is also noticeable in relation to NCR lands, the price of which is illuminating to compare with that of titled land. The court case shows how the government put a price on the NCR land at 250 RM per person in practice, a pitiful valuation compared to that seen for titled land (section 4.5.3). Although this was eventually nullified, the combined facts that many people accepted this price and that the villagers won the case in great part because of a not guaranteed unification of the villagers mean that this price could be applied. This shows how the substantial access to market and authority of government influences the extent to which all actors benefit from land.

Despite the government not having direct control over the lands now relieved of flooding, it does have control over which lands receive that benefit. This is manifested in the control of access to technology such as infrastructure, which behaves as a mediator to other kinds of access. Villagers maintain access to technology, and one effect of this is increasing migration due to the increased ease of travel. Development thus makes migration more desirable, not only for increased income of the migrant, but also in the sense that roads allow migrants to return with more ease, meaning the older generation in the village are more accepting. Therefore, through access to authority and technology, government can also influence the flow of human capital.

The power of government allows it to influence behavior without using coercive institutions (Foucault 1978). In Ribot and Peluso (2003), power is defined as “*the capacity of some actors to affect the practices and ideas of others.*” As described above, access and improved livelihoods were achieved for the villagers, however, this was at the discretion of the government: ultimately the ability to develop infrastructure lies with them and while in this case it had a mostly positive impact in terms of livelihoods, this is not necessarily always so (Sayer et al. 2012). The development policy influenced practices in Hilir by allowing the villagers to cultivate on newly accessible lands, as government sponsored banana schemes were introduced. The subsequently reduced attention to Selabu changed the significance of this land to a more cultural and historical one for the villagers of Hilir, although the development narrative of the government did influence people in other villages (see section 5). This accepting of the narrative by some villagers is the result of the government's capacity to affect ideas or discourse.

6.4. Land, conflict, and discourse.

The case study demonstrates two angles of the impacts of development goals on land tenure in the village. On the one hand, infrastructure made land significantly more valuable. On the other hand, development policies justify the granting of leases to companies which threaten access to NCR lands, the insecurity of which is compounded by its gross devaluation following a reduction in farming activity, as detailed above and in the introduction. These kinds of cases can often induce conflict within the village, which at times become a permanent schism, with the headman exploiting his position to control access (Andersen et al. 2016). In Hilir, this conflict did not

negatively affect the community in the long run, access by the villagers is even strengthened through increased social capital and the legal process.

The case illustrated how development priorities can induce conflict based on different interpretations of the right to access, which is essentially a battle of discourse. Villagers assumed the land to be rightfully theirs, as they had maintained access for as long as the history of the village. However, the access to authority gave the government the ability to lease out the land, regardless of ultimate right. The Land Code enables the implementation of this power by placing the burden of proof on the NCR claimants (Government of Sarawak, 1999) and, with the removal of section 5.2 (f) (see Box 2.) the difficulty in proving NCR land increases. Amendments such as this one have been seen as benefiting the government at the expense of native peoples (SACCESS, 2012).

This dispute of discourse was fought by establishing rights (i.e. property). Who had rights to this land required determining legality of access, and through the courts, right was eventually translated into ability when the villagers won the case (see table 3) and the companies lost access. This case exemplifies the “institutional dissonance” which occurs when goals of land use diverge, with government narratives viewing lands as “idle” if they are not used to create financial capital on the one hand and Iban customary “*Pulau Galau*” (Cramb and Wills, 1990; Andersen et al. 2016). Additionally, knowledge about land was also subjected to this institutional dissonance, where the villagers cannot recognize their land on government maps, but can demarcate their plots clearly between themselves using rubber and durian trees. This is the case in both Selabu and titled land, showing how traditional and institutionalized knowledge, especially regarding Selabu, clash in the arena of discourse.

The ambiguous legal status of the land, whether it was NCR or State land, allowed the government to allocate access as it pleased, confirming that government controlled access. Access of the company was secured via structural and relational mechanisms which were much more readily available to the company than to the villagers, especially access to authority, access to capital, and access to technology. Villagers had better access to knowledge (demarcation of plots in NCR land), history and social identity.

6.5. From insecurity to institutional endorsement

The case study illustrates the significant insecurity of NCR land compared to titled land, the holders of which benefit from right as opposed to solely ability. As we have seen, a maintained access can be lost when the power to control access is exercised (the government). With titled land, this lack of divergence between right and ability makes it more secure, putting control in the hands of the landowner. In practice, access to NCR land is simply maintained by the villagers, whereas access to titled land is controlled.

This leads villagers to apply for their NCR land to be titled. Efforts to convert NCR land into titled land have been important to the development goals of government since the Land Code was published, as this removes implications of community authority in favor of individualization, a policy which has been institutionally supported since the Brooke period (Cramb and Wills 1990). Encroachments such as the case unconsciously bring villagers to accept governmental institutional structures of land organization, to the detriment of more traditional land tenure arrangements and land practices of the Iban (Cramb 2007, 57).

7. Conclusions

The development policy of the Government of Sarawak has played a major role in people's lives by increasing their access to market and consequently, their incomes. Infrastructure allowed the villagers of Hilir the ability to benefit from their titled land, as well as allowing the government to introduce schemes. It has led to a shift from subsistent farming to the cultivation of market oriented crops. This increased commercialization is part of a growing trend which institutionalizes land tenure, increasing the dependency of villagers on markets. This push towards development and institutionalization causes dissonances in land tenure as conflicts over rights based access emerge. The conflict between accepting commercialization/institutionalization and resisting it in favour of traditional tenure systems is replicated in the village. In the court case detailed in this report, it led to a resolution based on legality which established rights based access for the villagers. It is clear that this community victory would not have been possible without the strengthening of social capital, demonstrating that increased social capital increases the security of land that doesn't benefit explicitly from rights based access. Despite this, the court case demonstrated that NCR land is significantly more insecure than titled land in a system which prioritizes institutionalized land tenure systems. It should be noted that villagers only gained rights based access through the legal framework, pushing them to this framework to maintain their access and formalize their control. Ultimately, conflicts like these make villagers find solutions through modern institutions such as applying for titles on NCR land, leading effectively to legitimize institutional systems of land tenure to the detriment of traditional tenure systems. Development effectively increases the participation of people in modern institutions such as the market and the legal system. This leads to increasing incomes, but also to increased reliance on these institutions.

8. Reflections on group work

Planning and collection of data was challenged by the fact that the research objectives of the Malaysian counterpart were developed unaligned with ours. It is vital for collaboration that knowledge, expectations and ambitions are shared amongst all participants in order to be efficient. As well, when doing social science in a community, dynamics within the research team should not disturb informants and cause tensions. It is good for data collection that intra-research team matters are discussed when informants (villagers) are not present. Cultural differences between the two research teams demanded some effort in communication. Differences in customs at university level may be so severe, that research may be planned, executed and evaluated at times so different that collaboration cannot occur. Hence, we invested in good communication and armed ourselves with patience in order to facilitate the data collection.

9. References

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