

Patterns of Local Mobility in an Iban Community of West Kalimantan,  
Indonesia

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by

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The undersigned, appointed by the Dean of the Graduate School, have examined the thesis entitled

PATTERNS OF LOCAL MOBILITY IN AN IBAN COMMUNITY OF WEST  
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## Abstract

This study examines the concept of mobility in relation to small-scale, subsistence-oriented societies, in which groups and individuals create complex resource networks in order to satisfy physical and social needs. Mobility is multi-dimensional and is defined as *the capacity or ability to move over a landscape*. The purpose of this study was to examine the mobility patterns of the West Kalimantan Iban community of Sungai Sedik, answering the following questions: (1) Where and how often did people travel? (2) At what time during the observed year did people travel? (3) Are there differences in travel patterns, dependent upon gender and age? (4) What are the relationships between the visited and the visitor, and how do the relationships affect the frequency and purpose of travel episodes? (5) How do social relationships affect travel for exchange? Dr. Reed Wadley of the University of Missouri-Columbia, detailed the movement of one Iban longhouse community by conducting a local mobility study among the thirteen households between April/May of 1993 and February/March of 1994.

The observations indicated that groups and individuals most often traveled in close proximity to the longhouse and more frequently during periods in which additional resources were necessary and at times of low swidden cycle labor demands during the observed year. Those who traveled were generally 16 years of age or older and most often female, and the relationships between the visited and visitor were most often close kin relationships. Due to the importance of the close kin relationships to the groups and individuals, the balance of exchange was highly important in order to maintain a cognatic network of abundant economic and social resources.

This study illustrates the importance of the interrelationship between the multi-dimensional mobility patterns of the Sungai Sedik community and their network of natural, economic, and social resources.

# Patterns of Local Mobility in an Iban Community of West Kalimantan, Indonesia

## Chapter One

### Introduction

Current anthropological literature on the movement of humans often focuses on hunter-gatherer societies as they move in search of subsistence resources (Binford, 1980; Casimir, 1992; Kelly, 1992; Lieberman, 1993). Hunter-gatherers generally build complex spatial networks of resources that, without major interferences, they are able to subsist on throughout the year. This practice implies that groups and individuals aim to maintain access to resources that they depend upon to meet their physical needs. In addition to ecological and environmental determinants, individuals and groups also utilize movement as a means to satisfy social needs (Casimir, 1992; Eghenter, 1999; Varien, 1999).

Movement can therefore be considered an important factor in maintaining access to both economic and social resources. Casimir (1992:5) recognizes that the term “resource” entails a diversity of elements that accommodate “material and/or non-material needs” (i.e., natural/economic and social needs). This broad definition allows for needed resources to be both near and far, and in many forms. Movement is often necessary to obtain resources that are not nearby. Individuals may need to travel short distances to borrow rice from a neighbor or travel further to buy supplies from a store. Some must use movement to harvest their crops, while others move in order to hunt, fish, and/or gather forest products. People might also travel to attend a wedding, visit kin, or

receive medical treatment. In all of the above examples, movement plays an essential role in gaining access to needed resources.

The concept of mobility is multi-dimensional, resulting in several different descriptions and classifications that attempt to define why people are mobile. For the purposes of this research, mobility is defined as *the capacity or ability to move over a landscape*. This definition indicates a broad spectrum of movement, including a wide range of distances and modes of transportation (on foot, and by pick-up, motorcycle, or boat). Crumley (1994:6) describes landscapes as the “material manifestations of the relationship between humans and the environment,” which emphasizes their reciprocal relationship. Landscapes are the result of these interactions, and movement is often the means by which these interactions occur.

Previous research has commonly emphasized that the Iban of Western Borneo – well known as swidden rice agriculturalists – primarily practice long-distance and long-term residential migration and circular wage labor migration (Freeman, 1970; Padoch, 1982; Wadley, 2000). These findings suggest that the Iban exhibit mobility patterns that are aimed at obtaining both primary and secondary subsistence resources, largely from remote environments. While these remote environments are important, the focus on residential and labor migration has overlooked short-distance and short-term movement that would allow the Iban to obtain needed resources from their local natural and social environments.

Recent data, gathered by Dr. Reed Wadley of the University of Missouri-Columbia, details the local, short-term movement of one Iban longhouse community. Between April/May of 1993 and February/March of 1994, Dr. Wadley conducted a local

mobility study among the thirteen households in the West Kalimantan Iban community of Sungai Sedik.<sup>1</sup> The observations included both outsiders and residents traveling to and from the community. These data will help to construct local mobility patterns among the Iban including where people travel, why they travel, how frequently they travel, and who they visit. In this study, I examine mobility with attention to how both economic and social resources structure these patterns.

This study of economic and social resources provokes many questions: (1) Where and how often did people travel? (2) At what time during the observed year did people travel? (3) Are there differences in travel patterns, dependent upon gender and age? (4) What are the relationships between the visited and the visitor, and how do the relationships affect the frequency and purpose of travel episodes? (5) How do social relationships affect travel for exchange? The data show that individuals and groups traveled distances up to 100 kilometers and some over 15 times per year. The time of year influenced who was traveling, their destination, and their purpose. There are also differences in travel distance, purpose and time of year in regards to gender and age. The relationships among the visited and the visitor(s) affected the frequency and purpose of the individual and group travel. The data show both reciprocal and market exchange in relation to different purposes for travel and to different types of kin. By answering the above questions, I will argue that movement among the Iban is truly multi-dimensional and is utilized to satisfy both natural and social needs.

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<sup>1</sup> Prior to 2004, this community was presented under a pseudonym, Wong Garai, which has been changed in consultation with the Sungai Sedik community.

## Chapter Two

### Mobility and Exchange

#### Concept of Mobility

Early concepts of mobility included images of hunter-gatherer groups roaming the land in search of food to collect and animals to hunt. Past literature has emphasized a clear difference between mobile and sedentary people. It was once assumed that only hunter-gatherers moved around and that sedentary groups were truly stationary (Kelly, 1992:43). One early model of mobility proposed four categories of hunter-gatherers: the first was *free-wandering groups*; the second, *restricted-wandering groups*; the third, *center-based wandering groups*; and the fourth, *semi-permanent sedentary groups*. (Beardsley et. al., 1956). *Free-wandering groups* traveled wherever they could to obtain needed resources without any territorial restraints or limitations. *Restricted-wandering groups* were limited to traveling within set boundaries. *Center-based wandering groups* maintained a central village, to which they would occasionally return after periods of travel. *Semi-permanent sedentary groups* lived year-round in one village, moving routinely to a new location after several years. These categories formed strict divisions between types of movement and ignored other dimensions of mobility.

Research has illustrated another dimension of mobility in which pastoralists' patterns of movement are established around the livestock on which they depend. Livestock survival relies on a regular supply of pasture and water that is affected by various environmental, political, and economic factors. Environmental factors, including temperature, rainfall, and disease, influence available resources and the associated movement needed to acquire those resources. Other factors can include abiding by

political boundaries, such as international borders, and avoiding governmental restrictions, such as taxes. The presence of economic markets can also dictate when and where pastoralists travel. While pastoralists are able to choose where to lead their livestock, the above factors influence those choices (Dyson-Hudson, 1980:15-18).

Kelly describes mobility as “universal, variable, and multi-dimensional” (Kelly, 1992:43), and argues that mobility should not only be looked at in terms of group movement, but also in terms of individuals. Individuals move in very different ways, alone and in groups with varying frequencies, distances, and temporal contexts. Age, sex, and physical ability also influence individual movement (1992:4). These variables make it difficult to locate the groups within the rigid contours of the model espoused by Beardsley *et. al* (1956).

Binford proposed two additional forms of movement that differentiate group and individual movement. Logistical mobility is characterized by individuals and small groups making task-based collecting trips that occur daily to and from the main residential camp. The gathered food resources are not likely to be stored, so foragers must collect what they need daily. Binford also identified residential mobility where groups make residential moves to directly gain access to specific resources for a longer period of time in comparison to logistical mobility. Residential movements allow groups access to resources that can be stored for at least part of the year. In order to gain access to resources that are not available in the destination of a residential move, collectors will make logistical moves out from the new residential camp to gain access to needed resources (Binford, 1980:5-10). The type of movement I examine among the Iban may be seen largely as logistical mobility.

Residential mobility can also be described in terms of “micro” and “macro” mobility, as observed by Chagnon among the Yanomamo. Micro-movements, characterized by moving a short distance, are made by the Yanomamo when they have exhausted their current horticultural gardens. Instead of clearing and replanting the mature garden, cuttings and seeds are replanted in an area just a few hundred meters from the existing garden. These movements can sometimes require the relocation of Yanomamo dwellings (1997:72). Macro-movements among the Yanomamo are characterized by the total abandonment of a producing garden with the intent to establish a new one a long distance from the old. Unlike micro-movements, this type of movement is not an effect of horticultural practices and instead is generally motivated by politics and warfare. This implies that in order for the Yanomamo to make a long-distance migration, they must be encouraged by repeated raiding from enemies. This type of movement fulfills the social need to move away from threatening outside forces (Chagnon, 1997:75). Among the Iban, both macro- and micro-movements have long been studied (Padoch, 1982, Freeman, 1970).

### **Mobility as a Resource Strategy**

Casimir suggests that mobility can be considered a resource, providing a flexible strategy “to ensure access to the manifold types of resources under various natural and/or social conditions” (1992:5-6). If an individual cannot find a particular resource in its usual location, movement provides the means by which to search for that resource in alternate locations. Individual and group movement, in a variety of modes, creates a broad, flexible strategy that is essential to survival.

Mobility patterns are often established based on the nature of the economic and/or social resources being acquired. If a resource is essential to the survival of an individual, that person will develop a pattern of movement to accommodate access to that resource. Conversely, movement can govern which resources individuals or groups use. If individuals cannot move far distances, they become restricted to utilizing nearby resources. Similarly, if a group is forced to migrate in a certain direction, then they would be limited to using the resources that they found along the way.

Varien's study of sedentism and movement in the archaeological record of the Mesa Verde region between 950 and 1300 A.D examined residential movement that accommodated access to resources. Varien argues that residential mobility was a practice by which "individuals and households gained access to the most important resources necessary for production," whether economic or social (1999:28). He contends that when movement is examined, social determinants are often dismissed; however, Varien's research shows that movement, within the social context, is a "process in which behavior is both enabled and constrained by the existing structure" (1999:5). Varien defines the social context in the archaeological record, recognizing instances of "land tenure, resource access systems, and marriage and residence rules" within the Mesa Verde social landscape (1999:28). Each of these practices potentially enables or constrains the practice of residential mobility by limiting resources or supplying additional resources.

Residential mobility was highly influenced by these practices and the related local rules, which were established through habits and articulated through customs. For example, it was customary that individuals and households claimed natural resources based upon historical land ownership, which created a record of movement across the

physical landscape (1999:210-11). Resource access triggered residential mobility based upon the lack of or abundance of needed natural and social resources. At the time of marriage, new households were formed, prompting residential mobility in search of needed resources (1999:28). These practices often left abandoned residences, which were later discovered in the Mesa Verde archeological record.

### **Mobility Costs**

As demonstrated above, individuals and groups often use movement to gain access to needed economic and social resources. Disturbances to these resources are often a common factor to which those seeking resources must adapt (Winterhalder, 1994:33). For the purposes of this research, disturbances are defined as interruptions to the normal state of resources. Groups and individuals define the “normal state” of their surroundings according to that to which they are accustomed. Disturbances to resources can be caused by a variety of things including weather, animals, or other groups or individuals using or over-exploiting the resources.

Disturbances in the acquisition of resources often create perceived risks and costs among groups and individuals. Access to resource patches through patterns of mobility can lower the costs associated with resource depletion. Both economic and social resource patches create resilience when groups and individuals are faced with resource disturbances.

The perceived costs of movement can affect the patterns involved in acquiring resources. Costs can range from losing time and energy searching for a resource that is not available to fighting with others over needed resources. In an attempt to lower these risks, groups and individuals may develop strategies with the intention to optimize the

outcome of movement. For example, the decision to move to a new location, residentially or logistically, may rest on the perceived cost of that move. If the cost of the move outweighs the return rate of resources at the new site, the decision to move might be affected (Kelly, 1992:53). Alternatively, if the move must happen and the costs outweigh the benefits, then the group must have a resilience strategy.

Resilience, or “the ability of [individuals and groups to maintain their patterns of resource acquisition] in the face of disturbances,” is an important aspect of risk perception. Movement provides a flexible means to gather resources, and access to a multitude of resources creates greater resilience in the face of disturbance (Winterhalder, 1994:37). For example, if a particular resource that a community is reliant on is depleted, they would be able to absorb this disturbance easily if they have access to another replacement resource. In this situation, the resilience level would be dependent upon the available resources; a higher resilience would entail access to a greater amount of replacement resources.

Resource patches may create additional resilience for individuals and groups gathering resources. Winterhalder (1994:33) defines a resource patch as “an ecologically distinct locality in the landscape” that is generally “assessed in terms of properties like the number of patch types and their size, quality, turnover and developmental dynamics (e.g., succession), and distribution.” Patches are distinguished from their surroundings by their unique environmental character, which generally has a biological or social significance to the exploiting individual or group (Wiens, 1976:83). Resource patches can include lakes for fishing and forest areas for collecting forest products, hunting, and collecting timber, or even specific trees that occur in isolation. A lake, for example, is

highly distinguished from the surrounding land, and if a lake has a density of resources (e.g., fish and plants) that is significant to the exploiting group, they would likely consider the lake a resource patch and routinely exploit it. If several patches in a landscape are spread out over a large area, then movement provides a way to gain access to those resources.

There are two broad types of resource patches, fine-grained and coarse-grained, which are defined by how and why they are exploited. Fine-grained patches have “a small scale [of resources] relative to the organism’s mobility” and are “utilized generally” (Winterhalder, 1994:33). Fine-grained resource patches are exploited for a wide variety of resources and allow individuals to travel to fewer locations while still gathering these resources. If a forager does not have the ability or time to move long distances for specific resources, they might resort to exploiting a fine-grained patch where they can get a broad variety of resources. A fine-grained patch would be an area where many resources can be procured at once, such as a forest containing a wealth of non-timber forest products ranging from trees for rubber tapping to reeds and vines for basket making. Being mobile might aid in the preservation of fine-grained resources. If a forager encounters many fine-grained patches, then movement will better enable that individual to move within a patch or shift between patches, so that over-exploitation of a patch is less likely to occur (Winterhalder, 1994:33).

Coarse-grained patches have a more specific variety of resources, so they are utilized more selectively in comparison to fine-grained resources. A coarse-grained patch might be a specific hunting ground, or lake, where only a certain type of game or fish can be acquired. These patches may be located further apart than fine-grained patches, so an

individual's range of movement would have to be wider in order to shift between coarse-grained patches (Winterhalder, 1994:33). The distribution of patches and differences in patch type can affect resource acquisition, and thus mobility patterns. In turn, movement provides individuals with a way to gain access to necessary resources that are found in varying patchy environments.

Resource patches can also be socially defined. Casimir's definition of a resource includes non-material needs, many of which might be social needs (1992:5). Just as mobility allows for movement to and between economic patches, it allows for movement to and between social patches. Social patches can also be both fine- and coarse-grained (Winterhalder, 1994:33). Fine-grained social patches might include a feast or festival where an individual can take part in business affairs, chat with kin, court potential mates, and secure promises of assistance. Coarse-grained social patches would be more specific, such as traveling to a cousin's house only to visit. In addition, the acquisitions of economic and social resources are not mutually exclusive. If one travels to visit kin socially, they might end up borrowing needed rice or receiving a gift of meat or fruit. The actual purpose for the initial visit may be difficult to define, but both social and economic resources would have been acquired.

### **Exchange and Mobility**

The Oxford English Dictionary defines exchange as the act of giving and receiving "reciprocally; to make an exchange of; to interchange." Although organized in different ways, material and non-material exchange is a universal human activity, which can include trading, sharing, giving, and borrowing. In economics, exchange is often found nestled between production and consumption, creating a cycle that comprises "the

*substance* of [an] economy, the daily transactions of producing, exchanging, storing, and consuming that form so much of human existence” (Wilk, 1996:28). Expanding on this cycle of exchange, economic anthropologists also examine the multiple ways in which people acquire “values, desires, and needs” and the ways in which these are obtained. Thus, a society’s economy is often studied by looking at why people want things, not just how they go about getting them (Wilk, 1996: 32). The Kula ring among the Trobriand Islanders exemplifies the many transactions of the exchange cycle. Malinowski’s work with the Kula demonstrates that these transactions are largely influenced by their social network, with mobility as an essential element in maintaining the exchange patterns.

The Kula is a “system of exchange that operate[s] with specific rules and obligations over wide distances and among people with different, although related, languages and traditions” (Weiner, 1988:140). Malinowski found that these ceremonial exchanges created “a partnership between two men [...that becomes] a permanent and lifelong affair.” The ceremonial exchange of two resources, either *mwali* (armshells) or *soulava* (necklaces made of red shell discs), is the central feature of the Kula (Malinowski, 1922, 83). This exchange can take place between individuals living within the same district or between neighboring districts, which can mean long travel over potentially dangerous seas (Malinowski, 1922: 99). Mobility is a key component to the Kula ring as partners must travel to some extent to make an exchange. There are also many secondary activities that are associated with this exchange including ordinary trade, bartering, or building canoes for exchange expeditions (Malinowski, 1922, 83). Canoes were a necessary means to achieve the over-seas movement for the primary exchanges and secondary trade and bartering.

The rules for exchange within the Kula ring are extremely complex and deeply rooted in “myth, backed by traditional law, and surrounded with magical rites.” Kula transactions take place during public ceremonies between partners; there are a limited number of people with whom an individual can exchange. Kula partnerships provide men with a close group of friends at home as well as allies in foreign lands. These partnerships create a network of lifelong relationships based on the mutual exchange of items (Malinowski, 1922:85). The direction of the exchange of necklaces and arm-shells is not random, rather geographical rules determine what is exchanged where. The exchange of items is quite circular – individuals are “constantly pass[ing] the arm-shells from left to right, and the necklaces from right to left” (Malinoski, 1922: 93). These geographical rules determine where individuals travel and how mobility patterns are formed that members will maintain throughout the life of their partnerships.

A further examination of the Kula by Weiner showed that the ultimate goal of exchange among the Kula was to “profit” from the transaction in terms of strengthening social relationships and gaining material goods; thus, individual exchange episodes had the potential to be largely unequal. Although participants experience loss in some transactions, they ultimately experience gain in others, equalizing the return rate on exchanges over time. These transactions between mutual partners resulted in the reciprocal exchange of physical resources and ultimately created a strong social network that facilitated lifelong exchange (1988:155).

In many societies, economic integration occurs largely through reciprocal exchange events. Wilk defines reciprocity as “a general kind of helping and sharing based on a mutual sense of obligation and identity” (1996: 7). He further states that

“people help each other because they have cultural and social relationships; they belong to the same family or clan.” In contrast, Sahlins described reciprocity as a relationship “between” individuals with separate and distinct socio-economic interests rather than a socially “within” relation, which implies a group collectively pooling resources (1972: 188). Reciprocal relationships may include “the sharing and counter-sharing of unprocessed foods, informal hospitality, ceremonious affinal exchanges, loaning and repaying, compensation of specialized or ceremonial services, [or] the transfer that seals a peace agreement.” The act of exchange may be voluntary or involuntary and the return may be freely given or demanded. The emotional investment in any reciprocal activity also can oscillate between disinterest that the other party reciprocate, to mutual knowledge that actions will be reciprocated, and finally to self-interest, in which one party is only concerned with his or her own gain (Sahlins, 1972: 192-193).

There are three main types of reciprocity: generalized, balanced, and negative. Each type is not necessarily practiced exclusively, and people can practice more than one form of reciprocity at any time. These three types of exchange exist on a continuum and, therefore, reciprocal acts do not always fall directly into one category or another. Social and economic circumstances can compel individuals to practice one form of reciprocity instead of another. The social relationship between those who exchange often determines which type of reciprocity is practiced. Generalized reciprocity is often associated with close kin relationships where there is minimal social distance. Social distance is greatest when negative reciprocity is practiced because these exchanges generally occur between strangers (Sahlins, 1972: 196). As demonstrated by the Kula ring, mobility and reciprocity are highly dependent on each other. Reciprocity is dependent on mobility

because individuals need a means to facilitate exchange. On the other hand, mobility is dependent on reciprocity when the exchange dictates where individuals need to travel. These links between movement and reciprocity are important factors in determining the characteristics of mobility patterns.

Generalized reciprocity is primarily characterized by altruistic transactions. Examples of this form can include a parent sharing resources with their child, an individual's traveling to help extended kin build a field hut, or a person making a charitable donation. In these three contexts, the giver most likely does not expect a direct return. The social act of giving overrides the actual material gift, so that those who receive do not focus on a material repayment that might be necessary with other types of reciprocity. In the unlikely event that a repayment is expected, it is undefined in terms of time, quantity, or quality. A generalized reciprocal relationship may continue indefinitely because the giver may not stop giving; "the goods move one way, in favor of the have-not, for a very long period" (Sahlins, 1972: 194).

Balanced reciprocity refers to a direct exchange between parties, where the exchange of resources is immediate and equivalent, as in certain "marital transactions, friendship compacts, and peace agreements." Although social relationships are still valuable with this type of reciprocity, emphasis is largely placed on the economic nature of the exchange (Sahlins, 1972: 194). However, balanced exchanges can also be made for social reasons. Chagnon observed the Yanomamo feasting and trading with others in order to develop alliances which served to limit violence and could even lead to intervillage marriages (1997:7). Balanced reciprocity may occur more frequently between parties with a more distant social relationship than the relationships associated

with generalized reciprocity. Parties involved in balanced reciprocity are likely to travel among villages for these exchanges rather than participating in balanced exchanges with the close kin with whom they are likely to live. Unlike generalized reciprocity, relationships can be damaged when the participants fail to follow the terms of the exchange. The material flow occurring in generalized exchanges is contingent on established social relationships, whereas during balanced exchanges, social relationships depend upon the flow of material goods (Sahlins, 1972: 195).

Negative reciprocity is the most impersonal form of exchange, where one party “attempt[s] to get something for nothing.” This form of reciprocity is often observed in the context of barter and can be viewed as the most economically advantageous. The relationship between the participants is built on their own, and often, opposing interests, where each employs tactics in an effort to maximize their potential benefit. This type of reciprocity is a matter of defending one’s self-interest at the expense of the other participant. Examples of negative reciprocity can include market exchange, haggling and even theft, where the flow is again one-sided, but instead of being altruistic, can be cunning and deceitful (Sahlins, 1972: 195). As with balanced reciprocity, parties participating in negative reciprocity are more likely to travel than those participating in generalized reciprocity, because the social relationships involved are often distant and individuals and groups would need to travel outside of their close kin network to find others to barter with or markets to visit.

## **History and Culture of the Iban**

The Iban “make up the largest part of the so-called Ibanic complex spread throughout northwestern Borneo,” which shares common cultural and linguistic features

(Wadley, 1997:33). The state of Sarawak is home to the majority of the Iban, making up one third of the population (numbering 506,528 in 1995), and smaller Iban populations reside within Brunei, Sabah (Malaysia), and West Kalimantan, Indonesia (1997:33) (Figure 1). The West Kalimantan population numbers approximately 14,000 (including the Sungai Sedik community) and the Brunei Iban population numbers approximately 15,000 (Wadley, 2000:129). The majority of the West Kalimantan Iban now reside in four subdistricts (*kecamatan*) along the Sarawak-West Kalimantan border: including Kecamatan (Kec.) Nanga Kantuk, Nanga Badau, Batang Lupar, and Embaloh Hulu, and constitute between 50-70% of the population in each district within this region of West Kalimantan (Wadley, 1997:33). This region is known to the Iban as the Emperan or flatlands, and they refer to themselves as Emperan Iban.

In 1995, within West Kalimantan's Batang Lupar subdistrict, the Iban population numbered between 2885 and 3107 members, who lived in 35 communities, 32 of which were based around longhouses (Wadley, 1997:33). During the period of Wadley's research, this district spanned 1,333 km<sup>2</sup> with a population density of 3.3 persons per km<sup>2</sup>, where the highest density occurred within the Lanjak area (1997:35).

The Sungai Sedik community (Figure 2) is approximately six kilometers from Lanjak, the closest, major market town and administrative center. Wadley further describes the area:

It lies in the hills northeast of Danau Sentarum Wildlife Reserve (DSWR) [... which] itself is an area of interconnected seasonal lakes and seasonally flooded tropical forests. The water catchment consists of lowland tropical forest in the hills and flooded forest in the low lying areas. A patchwork of various forest stages characterizes the hill country, the result of both commercial logging and swidden cultivation. (Wadley 1997:35)

The claimed territory surrounding the longhouse encompasses approximately 24 km<sup>2</sup> and consists of a mixture of “forest succession, agricultural plots, and specially preserved forest,” accommodating a population density of about 4.1 persons per km<sup>2</sup>. At the close of Wadley’s initial fieldwork in 1994, the community was comprised of 98 people living in 14 households, twelve of which occupied a single longhouse and two of which had separate unattached residences (Wadley, 1997:35).

In 1994, the demographic structure of Sungai Sedik showed a growing population with nearly 30% of the population under 15 years, close to 15% over 50 years, and over 50% under 25 years of age. Fifty percent of the population was comprised of female inhabitants under the age of 25 and male inhabitants under the age of 20. This skewing continued as 75% of the population included female inhabitants under the age of 45 and male inhabitants under the age of 40 years, making the adult sex ratio less than equal (Wadley 1997:37).

### **Migration History**

Historical Iban accounts suggest that prior to settling into modern Sarawak, the Iban occupied the Kapuas basin of West Kalimantan, now part of Indonesia. During the sixteenth century, ancestors of the Iban began the first alleged major migrations, leaving the Kapuas basin and heading to the Batang Lupar in Sarawak, initially settling on the Undup River (Padach, 1982:15).

These first migrations into the Batang Lupar, also known as the Batang Ai’, most likely occurred after the Iban had begun to make iron tools and grow hill rice. One possible reason for migration was “an attempt to remain independent from the expansion of Islamic Malay-Javanese political and economic power” (1997:42). Additional

migrations might have been prompted by an increase in the market demand for forest products including resins and latex. Migration also increased access to old growth forest for farming (Wadley, 1997:42). During the next five generations, the Iban migrated north, east, and west, where they occupied all but one major river in what is now Sarawak's Second Division. When the Iban migrated to land inhabited by hunter-gatherer or cultivating groups, these populations were either absorbed into the invading Iban population, forced to move, or destroyed (Padoch, 1982:15).

In the early 19<sup>th</sup> century large populations of Iban crossed from the headwaters of the northern tributaries of the Batang Lupar and Saribas rivers and migrated into the basin of the Rejang River, an area which now encompasses central Sarawak. Other migrants, from the upper Batang Lupar, crossed the border into what is now West Kalimantan "following the Leboyan and Kanyau (Embaloh) rivers and eventually reaching the Katibas, a tributary of the Rejang" (Padoch, 1982:15). In Sarawak the Oya and Mukah rivers of the Fourth Division were settled by 1870 and the Limbang River in the Fifth Division was settled by Iban in the early 1900s. In 1955, the government of Sarawak advocated a migration to Lundu in the First Division, followed by additional historical and present-day migrations, prompted by the government as well as individual and group needs (Padoch, 1982:16).

These migrations consisted of both macro and micro-movements. In micro-movements, households joined and split from longhouses and then relocated to other parts of the territories over a long period of time. Migrant families and, on occasion, entire longhouses, would make macro-movements, characterized by long-distance travel in search of new resources or to escape the threat of raiders. Newly-formed longhouses

generally consisted of close cousins or siblings, who provided most of the leadership (Wadley, 1997:43).

The people of Sungai Sedik trace some origins back to a man named Jampi and his son, Jinak, who most likely led followers out of the upper Batang Ai' and into the Emperan sometime during the 1830-40s, eventually settling in the Lanjak area in the 1860s (Wadley, 1997:43). After some years, the community left Lanjak and moved into the upper Empasuk drainage. The community secured rights to the land through occupation and use and established access to the nearby lakes, which provided fish and *pandanus* leaves for making mats (Wadley, 1997:44).

Since they migrated to the Empasuk drainage, the Sungai Sedik community has made approximately 15 different micro-movements, marked by old longhouse sites, or *tembawai*, which continue to provide fruit and forest products, since they migrated to the Empasuk drainage (Wadley, 1997:44). In the early 1900s, Jinak led a group on a macro-movement to explore the Melingkong area in the lower Leboyan River. They joined other Iban who had settled in the area, but were later pressured by the Dutch to return to the upper Empasuk drainage (Wadley, 1997:45). Foreign powers greatly influenced the Emperan Iban throughout the mid to late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The Dutch in Kalimantan and the British Brooke kingdom in Sarawak established a formal border between the two regions in an attempt to control the behavior of people on both sides. The Dutch made contact with the Emperan Iban in the 1850s in an attempt to control British access to the land and reduce raiding from Sarawak Iban. This constant colonial control created numerous territorial confrontations (Wadley, 1997:45-49).

Long after independence, the national government shifted its focus to region development and commercial resource exploitation, including a vast logging enterprise. The Sungai Sedik longhouse was protected with the help of a community leader who successfully proposed a logging ban within their territory, which led to the preservation of essential forest land (Wadley, 1997:49-50). In the 1990s, the Emperan area also witnessed, and was considerably affected by, the expansion of a government road network, with a road running through the Sungai Sedik territory by 1991. Effects of this new network included increased efficiency in communication and transportation and an expansion in logging and plantation projects (Wadley, 1997:50).

### **Social Organization**

Iban kinship is based on a strong bilateral structure, where, in most cases, the kinship obligations extend to a range of cousins. Within this system, Iban marriages among 2<sup>nd</sup> and 3<sup>rd</sup> cousins consolidate the kin structure, creating an extremely close cognatic network. According to classic kinship theory in anthropology, these bilateral kin groups or kindred do not co-exist with large-scale unilineal descent groups, so the formation of personal friendships is not hindered by loyalties to any specific descent group (Freeman, 1968:268, Wadley, 1997:51). Individuals have the choice among kindred members with whom they can build relationships. In the instance that an Iban household needs help, a wide network of relationships can be organized so that tasks can be completed (Freeman, 1968:266-67). One important characteristic of such bilateral societies is “the formation of temporary, kindred-based, action groups” (Freeman, 1968:269). These groups are used for “exchange labor, hunting, gathering forest

products, labor migration, or in the past, trading expeditions and headhunting” (Wadley, 1997:52).

The longhouse stands as the central-most attribute of Iban social organization, “a physical structure and the largest social, political, and ritual unit in traditional Iban society” (Freeman, 1968:268; Wadley, 1997:53) (Figure 3). The longhouse is comprised of “a series of conjoined family apartments, each the [residence] of a separate [*bilik*].” The apartments make up one structural unit, which can stretch “for a hundred yards or more.” (Freeman, 1968:268).

The *ruai*, a covered, open gallery that runs the entire anterior length of the longhouse, is divided into individually maintained family sections, but remains accessible to all residents. Sather explains that this separation is symbolic of the separation between *bilik*, or household, and longhouse. Each *bilik* apartment represents a “family’s domestic space, symbolizing its existence as a discrete [unit], while the unpartitioned gallery on the other side is a public space, symbolizing the longhouse as a whole and its membership in the larger riverine society that encompasses it” (Sather, 1993:67-68). The third area within the longhouse, adjacent to the *ruai*, is the *tanjo*, an “uncovered verandah that serves as an outside work space where people dry their rice, hang freshly washed clothes, and perform other outside tasks” (Wadley, 1997:56).

Cognatic relationships are prevalent within longhouse communities, evident in the closely-linked families (siblings or close cousins) who reside in the center-most apartments. Adjacent to these core *bilik* are families with less direct relationships; any type of cognatic relationship with the existing families qualifies them for residency. Thus, distantly related families often become members of the same longhouse, and are

presented with the opportunity to widen their kindred (Freeman, 1968:268). Just as families are able to join a longhouse, they have the choice to withdraw from that longhouse, creating an open system within the longhouse community and allowing for the possibility to migrate when necessary. If a family decides to move, it will often be to another longhouse where there are additional kinship ties (Freeman, 1968:269).

The *bilik* “form[s] the basic social, economic, and ritual unit in Iban society.” Although the *bilik* is economically independent from the longhouse, it is still politically and socially incorporated (Wadley, 1997:61). Joining a *bilik* is usually the result of birth, adoption, marriage, or incorporation (Wadley, 1997:64), although Freeman observed that actual membership in a household could only be achieved by an extended period of residency (1970:14). Loss of membership in a *bilik* formally happens by joining another *bilik*, but continual absence does not always mean that someone has joined another *bilik*. For example, some children often attend boarding schools, and men frequently participate in *bejalai*, or long-term wage labor journeys. In these cases, regular correspondence with absentees ensures that they remain members, while speculation occurs regarding individuals who do not keep in contact while away (Wadley, 1997:64).

The *bilik* are the primary units of economic production, and the longhouse defines the extent of *bilik* rights through its territory. This access consists of “a fairly well-defined territory that is a mix of various stages of forest growth, specially preserved forest, and groves of fruit and rubber trees.” *Bilik* coordinate with each other for direct access to resources such as fallowed forest, which can be used for farming, hunting, and gathering (Wadley, 1997:57). Longhouse *bilik* are formally independent; each can control the use of certain property such as “farm land, fruit trees, heirlooms, and rubber

groves;” yet they depend on each other for exchange labor and occasionally on other longhouses during crop failures (Wadley, 1997:61). Fallowed forest can also be available to the rest of the longhouse community, and members are free to take firewood, uncultivated food resources, and other forest products, but are restricted from using any items that have been planted by other household members or their ancestors. Longhouses can grant permission to outsiders who request access to resources that are unobtainable elsewhere (Wadley, 1997:58).

The Sungai Sedik social organization fits the foregoing description of the Iban social organization. For example, there are extensive cognatic networks that allow individuals to build relationships and form kindred-based action groups. Wadley (1997:53) found kinship ties among all Sungai Sedik adults. Most of these ties occurred among second and third cousins while other ties include people related through marriage and adoption, reflecting the acceptance of affines into the kinship network (Wadley, 1997:53). As Wadley observed, Sungai Sedik fits the description of a longhouse community, consisting of many *bilik* which hold access rights to secondary forest and fruit and rubber trees, all within the community’s territory (Wadley, 1997:61).

### **Subsistence Economy**

The Iban subsistence economy is based on the cultivation of rice and the simultaneous management of forest resources (Wadley, 1997:83). Annually beginning in May, each household selects and prepares cultivation sites for hill swiddens, by slashing the underbrush followed by the felling of trees in July. By mid-August the felled vegetation is generally dry enough so that the fields can be burned and then planted with rice, through sowing and dibbling. After the rice is planted, the Iban build field huts

where they stay while weeding and treating the rice with herbicide; guarding the crop is a main concern since it draws attention from pests as it begins to fruit and ripen. In February, the harvesting process begins by threshing the rice to separate the grain from the panicles followed by further processing including winnowing and storage (Wadley, 1997:84).

The sexual division of labor is significant to swidden cultivation. Male labor includes slashing, felling, dibbling during planting, and carrying in the harvest, while women are concerned with slashing, sowing, weeding, and harvesting, taking over many of the “male” tasks only during their absence (Wadley, 2002:27). Labor exchange is necessary between farming Iban households, especially during planting and harvesting periods when labor demands are high and scheduling is tight:

The most intensive period of labor exchange takes place during the planting of hill swiddens: Households try to complete their felling at about the same time so that they can burn and plant the fields together. This coordination helps to reduce the risk to individual fields from pest predation. Planting in hill swiddens is the only time during the farming year that laborers from every household come together to plant the rice of each household in a day-to-day rotation. (Wadley 1997:88)

During other times when extra labor is needed, individual households will make exchange labor agreements on a more limited basis. Labor exchange generally occurs between women during weeding, slashing, and harvesting periods, while labor exchange between men occurs during felling. Women’s and men’s labor is viewed as being equal, and the rule, “one day of work exchanged for one day of work,” applies “equally to the same type of work (e.g. weeding), different work at the same time (e.g. felling and limbing), or work at different times (e.g. felling and weeding)” (Wadley, 1997:88, 91).

Farming, as the primary source of subsistence, has been made easier with the growing use of chainsaws. At Sungai Sedik, like other longhouse communities, men use chainsaws for cutting hill swiddens in secondary forest. The absence of males during periods of *bejalai* does not affect the type of forest growth being cut because the chainsaw allows for the remaining men to cut the thickest of secondary forest growth (Wadley, 1997:183). During Wadley's fieldwork, there were six Sungai Sedik households that owned seven chainsaws, which were often purchased with money earned during wage labor trips (Wadley, 1997:100).

In addition to rice cultivation, households also participate in other subsistence activities including hunting, fishing, collecting forest products including non-timber forest products (NTFPs), tapping rubber, cultivating pepper, and working in wage labor. With the exception of wage labor, most of these activities occur within a short distance of the longhouse and they form an important set of reasons for local mobility (Wadley, 2000:131).

Men are generally in charge of hunting and fishing which “provides families with important sources of animal protein” (Wadley, 1997:104). Nearby streams and rivers provide fishing spots for males who use fish traps, drag nets, hook and line, and spear guns, and shrimping spots for females who use special straining baskets to collect the aquatic animals. Nearby lakes provide the best resources for fishing, especially during the dry season when fish are forced to congregate in shallow water and are easily caught (Wadley, 1997:105).

Iban farmers often supplement their rice cultivation with the collection of NTFPs (Wadley, 2002:27). NTFPs can include products such as fuelwood, rattan, bamboo,

fibres, medicines, gums, wild foods, and rubber. NTFPs also provide materials for the production of goods, including wood for furniture and implement making, cane, reeds and vines for basket, mat and handicraft production, wood for charcoal production, nuts and seeds for oil processing, and bark for tanning (Parnwell and Taylor, 1996:270). Iban communities rely on NTFPs for consumption, as well as an additional source of income through barter or exchange. Edible forest products can also be used as emergency supplements to minimize risk during periods where food supplies are insufficient and income from agriculture is low (Parnwell and Taylor, 1996:270). The availability of forest resources reduces the chance that individuals and groups would go without needed resources.

The cultivation of rubber has been incorporated into the agricultural cycle of many *bilik*. Dove observed that “swidden cultivators [used] surplus land and labor resources within the swidden system to cultivate rubber” (1993:139). During the swidden cycle, labor demands tend to fluctuate, allowing cultivators to focus on the collection of other resources. Dove found that during periods of low swidden labor demand, approximately eight months out of the year, the Kantu’ focused efforts more heavily on rubber cultivation. The frequent oscillation between high and low labor demands during rice cultivation and the increased output when tappings are spaced between extensive periods of time makes rubber exploitation an ideal endeavor for many *bilik* (Dove, 1993:139-140).

At Sungai Sedik, ten of the households own “small groves of rubber, with trees numbering between around 100 to over 2,000” (Wadley, 1997:103). Tapping rubber rarely replaces rice farming as the primary economic source, but is commonly tapped

when rubber profits are high, cash needs are immediate, and farming activities are slack (Wadley, 1997:104). Wadley observed that the children frequently tapped rubber to pay for school expenses (Wadley, 1997:103).

The Iban rely upon wage labor as a supplemental resource for needed income. Wage labor can include a variety of jobs, such as digging ditches, trash collection, surveying for roads or housing developments, plantation work (i.e., rubber tapping, planting oil palms, and cutting pepper poles), logging, construction, and teaching (Wadley, 2000:136-137). Historically, the Iban would acquire wealth by trading forest products, during which long-distance travel was often required, with members occasionally being absent for ten or more years. These long-term trips were, and still are, included in the behavioral category of *bejalai*, characterized by trips to gain access to social and material resources. Headhunting and residential scouting were also secondary outcomes of such travel (Wadley, 2000:132).

Men are primarily the ones who travel away from their *bilik* to work for wages, during times when their labor is not needed in the cultivation cycle, generally after the fields are cleared and the rice is planted and until harvest begins. The subsistence economy of rice cultivation cannot be entirely abandoned in favor for wage labor because these trips do not provide for all subsistence needs; however, *bejalai* wage labor trips often provide the money needed to buy extra rice, pay for schooling, and/or buy high-valued consumer goods, as well as provide an opportunity for men to escape extra farm work or seek out adventure (Wadley, 2000:135). As a result of *bejalai*, chronic male absence is not uncommon, with some men being gone for months or even years (Wadley, 2000:131). The longhouse did not grow pepper during Wadley's initial fieldwork,

excluding a prosperous period during the mid-1980s and in the late 1990s, because of the lengthy distance to markets and the intensive labor. Other local crops, including palm wine, are sold occasionally, but Sungai Sedik Iban are less diligent about tapping and selling the wine as other communities heavily supply the Lanjak market (Wadley, 1997:103).

Although current anthropological literature focuses on the movement of hunter-gatherer societies searching for subsistence resources, individuals and groups in other kinds of societies also use movement to satisfy social needs, in addition to ecological and environmental needs. Movement aids in the creation and maintenance of both social and physical resource networks that individuals and groups can rely on when resources are not readily available or insufficient. This practice implies that groups and individuals aim to maintain access to resources that they depend upon to meet their physical and social needs. The data on the local mobility patterns of the Sungai Sedik community exemplify how social and economic resources structure these patterns.

## **Chapter Three**

### **Methods**

The data on local movement were collected for one year, between April/May 1993 and February/March 1994. During the first calendar month (April 1993) observations of traveling and visiting were recorded from the middle of the month (April 13) to the middle of the following month (May 12, 1993). The next set of observations was recorded from June 11 to July 14. This pattern was continued through March 1994 producing observations that were documented every other month for a final total of six months of observations.

During this one year period, a literate member, or members, from each *bilik* recorded the movement data for his/her/their own household. These literate members were often school kids, as they were the ones most readily available who could read and write. Wadley paid each participating household the equivalent of US \$2.50 at the end of each month. Wadley created two sets of quick questions that would cover all aspects of traveling or visiting (Appendix A). One set of questions was designed to obtain information about Sungai Sedik residents traveling to or visiting outside of their community, while the other set of questions was aimed at outsiders who were traveling to or visiting the Sungai Sedik longhouse. When any Sungai Sedik residents left the community, notes regarding who traveled, where to, dates of travel, mode of transportation, and main reasons for travel were recorded. Information about outsiders who came to Sungai Sedik was also recorded including who visited, any relationship to Sungai Sedik, where they were from, their dates of arrival and departure, whether they came to the longhouse or to a field hut, their mode of transportation, and their main reasons for visiting. The record-keeping was routinely supervised by Wadley for control over “inter-observer variation” (within and between households), but this was determined to be negligible because the questions were so basic and short.

At the end of the one year study period, there were a total of 1005 recorded observations, comprised of 560 observations of traveling away from Sungai Sedik and 445 observations of visitors to the Sungai Sedik community. For analysis, using Bernard’s (1988:102-103) sampling formula to ensure a 95% probability sample with a 5% confidence level, a sample size of 278.1 was calculated, which was rounded up to a sample size of 300. To acquire this sample size, proportional samples were drawn from

the visiting and traveling data subsets. The final proportions were 55.7% or 167 records from the traveling data set and 44.3% or 133 records from the visiting data set. In order to preserve proportionality with respect to seasonality, the records were drawn from these subsets proportionally by month. For example, in month one, traveling had 17.3% of the total subset records so 29 records were sampled. In the same month, visiting had 16.5% of the total subset records resulting in 22 samples records. All of the records included in the sample were drawn randomly using a standard random number table (Bernard, 1988:460-462). These 300 observations were all coded and entered into a computerized database.

The data were analyzed using measures of central tendency and proportions. In order to get accurate results regarding the numbers of men and women traveling, it was necessary to calculate the proportion of observations per numbers of people present. For the 16+ age group, Wadley's 1992-1993 time allocation data was used to identify the average number of men, 16, and women, 30, that were present in the Sungai Sedik longhouse at any one time. The numbers of males and females in the zero to 15 year age group were drawn from Wadley's (1997: 40-41) population pyramid data, being 20 and eight, respectively.

Much of the analysis regarding seasonality, kin, and exchange is focused on the age group of 16+ years. Longhouse members younger than 16 years are not included in this analysis because at this age their contribution to the collection of subsistence resources is significantly less than that of the older members.

The observations were recorded in a way that separated the gathered information into categories including destination, kin, transportation, purpose and who. The

categories of destination, purpose, and kin were further broken down into categories that could be analyzed efficiently for patterns that would accurately display the movement of the individuals and groups observed. The destination codes, depicting where people were traveling to or visiting from, were separated into categories based on their distance from Sungai Sedik including zero to five kilometers, six to ten kilometers, 11-15 kilometers, and 16+ kilometers.

The purpose codes (reasons individuals traveled or visited) were separated into the following categories: agriculture, ritual, medical treatment, social, political, non-subsistence work activities, food products, and non-food products (Appendix B). The main purpose categories were further divided into sub-categories including rice farming and cash crops for agriculture, traditional and non-traditional rituals, traditional and clinical medical treatments, kin and leisure social purposes, wage labor and other non-subsistence work activities, NTFPs and agricultural food products, and implements and forest products for non-food products. One of the main purposes for travel and visiting observed in this study was social. Within the social category, many types of visiting were noted. Many of these types of visits were specifically defined (i.e. visiting ill kin), but in cases where there was no specific reason stated for visiting, the broad purpose of visiting was recorded and categorized under the social, leisure purpose. Throughout the discussion of the results and analysis in this paper, the term “visiting”, when used in regards to the social purposes category, denotes general visiting for leisure purposes.

The purpose codes were also divided into exchange categories (Appendix C). The exchange categories included sell, collect, request, deliver, fetch, social visits, work, attend, and other. These exchange categories all denote a specific action that took place

during the travel/visit episode. Many of the purposes were placed in a certain category because of the verb used in the reporting of the action. All of the purposes that were reported as selling something were logically placed in the exchange category of sell. Other exchange categories were not so obvious. The exchange category of collect included all purposes where individuals and groups had to physically collect something, often not from a person (i.e. catching fish, tapping rubber). The exchange category of fetch included purposes where individuals or groups often had to fetch something from another person (i.e. fetch cooked rice, fetch pig meat, fetch goods/money sent from *bejalai*). If the purpose did not explicitly state an exchange category, then the action of the purpose was examined to determine in which exchange category it best fit.

The kin codes were categorized into close, distant, ambiguous, and non-kin (Appendix D). These kin codes do not necessarily represent an actual blood tie in all instances, but rather they signify a relationship between the traveler and the visitor. In some cases this relationship was an absolute kin tie (close and distant kin) and in other cases, the kin code only signified an ambiguous (primarily metaphorical or friend) relationship or a non-kin relationship. Metaphorical relationships are defined as relations where the exact or actual kin links were not specified or not known, but were glossed by general kin terms. When discussing the general term of kin in regards to the entire data set, this includes close, distant, ambiguous, and non-kin. This general term denotes a wide range of relationships that affected patterns of mobility.

These variables; distance and frequency, gender and age, seasonality, kin, and exchange, all influenced and were influenced by the movement of the travelers and visitors observed for this study. In the following sections each variable or set of variables

will be analyzed in regards to the mobility patterns that were evident among the observed individuals and groups.

## **Chapter Four**

### **Results**

#### **Demographic Data**

##### Traveling

There were a total of 55 individuals from the Sungai Sedik community who engaged in at least one travel episode during the 1993-1994 observation year. Twenty-four of these individuals were males and 31 were females. Of a total of 167 travel episodes; males were the primary travelers in 57, or 34 percent, of the travel episodes, whereas females were the primary travelers in 110 episodes, or 66 percent.<sup>2</sup> Males aged 16 years and older were the primary traveler for 81 percent of the episodes involving travelers 16 years and older and females in the same age group comprised 75 percent of the travel episodes. According to Wadley's 1992-93 time allocation data, 100% of males and 83% of females (both aged 16 years and up) who were present at the longhouse traveled at least one time during the 1993-94 year period (Table 1). The population of Sungai Sedik fluctuated throughout the year as children cycled between boarding school and home, and men between wage labor and home; therefore these percentages compare the proportion of travel episodes recorded per number of people present on average at any time. The average age of all individuals traveling was 31 years. The average age for

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<sup>2</sup> Primary travelers/visitors are those who led or motivated a travel or visiting episode. Other individuals may have accompanied the primary travelers/visitors on their trip, but those individuals are not included in this data analysis.

those who traveled, aged 16 years and up, was 37.6 years, with an average age of 39 years for males and an average female age of 36.7 years.

**Table 1: Proportion of observations per number of people present\***

	# of individuals who traveled at least once	# of individuals present**	% of those who traveled
Males	16	16	100
Females	25	30	83
Males and Females	41	46	89

\*Aged 16 years and up

\*\*According to Wadley's 1992-1993 Time Allocation Data

### Visiting

During the observation period, multiple groups and individuals visited the Sungai Sedik community. There were a total of 133 visiting episodes made by individuals or groups of males, individuals or groups of females, groups of mixed males and females, and individuals or groups of unspecified gender. Age was not recorded for any of the visitors. Twenty individual or groups of males visited the longhouse a total of 28 times, making 21.1 percent of the total visiting episodes, and females visited a total of 23 times, or 17.3 percent. A total of 14 mixed male and female groups made visits to Sungai Sedik 56 times (42.1). There were also ten individuals and groups, whose sex was unspecified, who traveled a total of 26 times, or 19.6 percent.

### **Distance and Frequency**

#### Traveling

The number of travel episodes an individual was involved with varied over the observation period. Individuals traveled an average of three times during the year. Most often, individuals traveled only one time during the study period. Twenty of the 55 travelers, or 36 percent only traveled once. Traveling two times during the observation year was the next most common individual traveling frequency, occurring for 14

individuals, or 25 percent of the time. Five individuals traveled three times each during the year; six individuals, four times each; four individuals, five times each; and three individuals, six times each. There was also one individual who traveled eight times; one, nine times; one, ten times; and one, 16 times throughout the study period. These travel episodes will be discussed below with regard to the gender and age of the traveling individuals.

Sungai Sedik residents traveled to 18 destinations ranging in distance from two to over 50 kilometers from the longhouse. There were 128 episodes of travel, or 77 percent, to destinations zero to five kilometers from Sungai Sedik; 23 episodes, or 14 percent, to destinations six to ten kilometers from the longhouse; three episodes, or two percent, to destinations 11 to 15 kilometers away; and 13 episodes, or seven percent, to destinations distanced over 16 kilometers (Table 2). Travel to Lanjak and Sawah (the closest longhouse community), located five and two kilometers from Sungai Sedik, respectively, was the most frequent with 90 travel episodes, or 54 percent, to Lanjak and 33 travel episodes, 20 percent, to Sawah. People traveled to 16 other destinations between one and eight times during the observation period, with one travel episode per destination being the most common (occurring 39 percent of the time).

**Table 2: Frequency of purpose and distance of destination from Sungai Sedik**

	0-5 km	6-20 km	11-15 km	16+ km	Totals / % Total
Social	28	7	0	3	38 / 22.8%
Agriculture	12	1	0	1	14 / 8.4%
Food products	19	4	2	1	26 / 15.6%
Medical treatment	15	0	0	0	15 / 8.9%
Ritual	12	9	0	5	26 / 15.6%

Political	3	0	0	0	3 / 1.8%
Non-subsistence work activities	1	0	1	2	4 / 2.4%
Non-food products	10	0	0	1	11 / 6.6%
Other	28	2	0	0	30 / 17.9%
Totals / % Total	128 / 76.6%	23 / 13.8%	3 / 1.8%	13 / 7.8%	167 / 100%

People traveled to Lanjak for a number of reasons. Individuals most frequently traveled to Lanjak in order to buy supplies such as coffee and sugar, which occurred during 22 separate travel episodes, or 24 percent. Only one observed episode of buying supplies was done at a destination other than Lanjak. Lanjak was also the only destination where children got their school photos taken. Four episodes associated with school photos occurred, all within the April/May month of observations, just before the end of the school year. There were 18 travel episodes to Lanjak in the social purpose category including seven episodes of visiting friends or kin, one episode of attending entertainment, and five episodes of attending a cockfight, with four of the five occurring during the last month of observations, on December 29 and 30 when demands on men's agricultural labor were low.. Among the social reasons for traveling to Lanjak were four episodes of visiting ill kin (two episodes being overnight stays and two as day trips) and one episode of stopping in on kin on the way home. There were five episodes of travel to Lanjak associated with both traditional and non-traditional ritual. One individual traveled in order to deliver invitations to attend a ritual (*ngambe' ngabang*). The other four episodes were associated with non-traditional rituals including attending church for a wedding, attending a Christian ritual, and attending a Muslim ritual. There were twelve

episodes of travel to Lanjak for clinical medical care. This was the only destination for this type of treatment.

Lanjak was also a place where individuals traveled to fulfill agricultural and food product needs. There were three instances of individuals selling rubber, two instances of individuals selling illipe (*Shorea macrocarpa*) nuts, and one instance of an individual selling cassava roots and chickens. There were no other reports of individuals traveling to other places to sell anything. Other market behavior included buying salted and smoked fish, buying *berau* (milled rice), buying *ai' cuka'* (acid used to coagulate newly tapped rubber), and buying parts for a chainsaw. Including the episodes for buying supplies, there were a total of 29 episodes associated with buying in Lanjak. There were only three other episodes of buying activity in travels to destinations other than Lanjak. Other reasons for travel to Lanjak associated with food products were to salt and smoke freshly caught fish, to deliver *berau*, and to fetch pig feed. Individuals also traveled to Lanjak for other agricultural reasons. In April, there was one episode of travel in order to fetch a pick-up truck to haul in newly harvested rice, and there was also an individual who traveled to Lanjak in September to assist with hill swidden work. Other reasons for travel to Lanjak included five episodes for collecting *pandanus* leaves for weaving, one episode to fetch school supplies, and one episode to fetch goods and money sent from men on labor migration.

As noted above, there were 33 travel episodes to Sawah, the closest community to Sungai Sedik, located only two kilometers to the northeast. Twenty-seven percent of these had social purposes including seven visiting episodes of visiting kin. Sungai Sedik residents also traveled to Sawah for agricultural reasons including building a field hut,

tapping rubber, and helping with hill swidden work. Sawah was also frequently visited in order to obtain food and non-food products. Included in these categories were four trips to collect fruit, two trips to hunt, two trips to buy palm wine, and single trips for collecting maize and fetching cassava tubers. Individuals also traveled to Sawah to saw lumber and fetch a chainsaw, shotgun, and clothes. Five trips to Sawah were for ritual purposes including two separate episodes to fetch a live pig (for sacrifice), one episode to request *pemali* (ritual compensation), one to attend a traditional ritual, and another to attend a Christian ritual. There were also two episodes with medical purposes including one for a shamanic treatment and one to fetch a shaman.

Sungai Sedik residents traveled to three other destinations within five kilometers of the longhouse. Three recorded episodes of travel were to Sungai Luar, another longhouse community located four kilometers from Sungai Sedik. Two of these episodes were associated with *ngabang* (attending an outside ritual) and one episode of fetching an eloped daughter. There was one episode of travel three kilometers to the longhouse of Sungai Iring in order to fetch a shaman. The last episode of travel was a five kilometer trip to Sawah, Sungai Luar, and Sungai Long (another longhouse community) in order to conduct a series of government business meetings in each community.

Residents traveled to other communities six to ten kilometers away from Sungai Sedik for 14 percent of the observed travel episodes. There were six episodes of attending an outside ritual and two episodes of attending a Christian ritual. Also associated with traditional ritual was one episode of fetching house hold heirlooms. Three of the travel episodes had the purpose of visiting, and there was one reported episode of visiting ill kin and one episode of escorting kin. There was also one episode

of helping with work on a hill swidden, one episode to spin weaving thread, and one episode of buying supplies. Also associated with this destination category were two episodes of catching fish, one to fetch fish, and one to collect fruit.

There were only three episodes of travel to destinations 11 to 15 kilometers from Sungai Sedik. These were two trips 12 kilometers into the lakes to catch fish, and one episode to Entebuloh, a longhouse 11 kilometers upriver, to fetch goods and money sent by men on labor migration. Travel to destinations over 16 kilometers from Sungai Sedik comprised eight percent of the travel with a total of 13 episodes. Three of those episodes were travel to visit, four episodes to attend an outside ritual, and one episode to *ngetas ulit* (lift mourning taboos). There were also three episodes of fetching items including newly harvested rice, fish, and a chainsaw, as well as one episode of picking up someone's salary.

The traveling episodes detailed above were all related to a certain mode of transportation (Table 3). Traveling by foot was the most regular mode of transportation from Sungai Sedik, being associated with 103 episodes, or 62 percent. Eighty-one of these travel episodes were to destinations within five kilometers of Sungai Sedik. Twenty-five of the 26 travel episodes that occurred by way of pick-up truck were also within five kilometers of the longhouse. Eighty-three percent of travel six to ten kilometers from Sungai Sedik was by foot. All travel episodes 11 to 15 kilometers from the longhouse were also by foot. Seventy-seven percent of the travel episodes over 16 kilometers from the longhouse were associated with both foot and boat transportation. Other modes of transportation included both on foot and by pick-up truck or motorcycle. At the time of the data collection, travel by foot was favored because of the relative lack

of and expense of vehicles. When vehicles were used, the travel was mainly local (the majority of episodes by motor vehicle were within five kilometers of the longhouse) because of the poor roads. Boats were available as the only way out of the area (the only episodes associated with a boat were 16 or more kilometers from the longhouse).

**Table 3: Mode of transportation related to destination distance from Sungai Sedik**

Mode of transportation	0-5 km	6-10 km	11-15 km	16+ km	Totals/ % Total
On foot	81	19	3	-	103 / 61.7%
Pick-up	25	1	-	-	26 / 15.6%
Motorcycle	11	1	-	1	13 / 7.8%
Boat	-	-	-	2	2 / 1.2%
Bicycle	-	-	-	-	-
Pick-up and on foot	7	2	-	-	9 / 5.4%
Motorcycle and on foot	4	-	-	-	4 / 2.4
Boat and on foot	-	-	-	10	10 / 5.9%
Totals / % Total	128 / 76.6%	23 / 13.8%	3 / 1.8%	13 / 7.8%	167

### Visiting

Visitors came from 22 locations ranging in distance from two kilometers to over 50 kilometers away from Sungai Sedik. There were 83 visiting episodes, or 62.4 percent, from locations distanced zero to five kilometers from Sungai Sedik. Thirty of the episodes, or 22.6 percent, were traveled by people located six to ten kilometers from the longhouse. One episode, or 0.8 percent, was from an unknown visitor located 12 kilometers away, and the remaining 19 episodes, or 14.29 percent, were visitors traveling a distance of 16 or more kilometers (Table 4). Travel from Lanjak and Sawah comprised more than half of the total visits with 36 episodes (27.1 percent) of visitors coming from Lanjak and 38 episodes (28.6 percent) coming from Sawah. Visitors from the other 20

locations traveled to Sungai Sedik between one and nine times, with one visit from each location being the most common, which occurred 50 percent of the time.

Visitors from Lanjak traveled for many different reasons. There were eight episodes with social purposes – two episodes of general visiting, two where people stopped in on their way home, one of escorting kin, one of helping to build a coffin, and two of *ngayap* (nocturnal courting). People also traveled from Lanjak ten times for ritual reasons, including to attend rituals, request *pemali*, attend *melah pinang* (a traditional Iban wedding ritual) and for school holiday. People also traveled from Lanjak for agricultural purposes including three episodes of helping with swidden work, checking on a swidden, harvesting rice for pay, and fixing a padi miller. There were also episodes of visiting to attend a government meeting, provide medical care, deliver an *agak* (traditional carrying basket) or implement, and fetch *berau*. The only episode of selling that was associated with the visiting data set was an individual from Lanjak selling salted fish.

Individuals traveled from Sawah to Sungai Sedik in 33 separate episodes. Almost 58 percent of these episodes were for social reasons, including eight instances of stopping in on the way home (usually from Lanjak), seven of social visiting, one of visiting ill kin, one of escorting kin, one to leave kids with kin, and one to play with other kids. There were also eight episodes associated with a ritual. Four of these were to attend a ritual, three to attend a Christian ritual, and one to fetch heirlooms. Individuals also traveled from Sawah in order to collect fruit, deliver smoked meat, hunt, fetch a worker, and to fetch a pack, bush knife, and paint. Agricultural purposes for traveling from Sawah included helping with hill swidden work and milling rice.

**Table 4: Frequency of purpose and distance of origination from Sungai Sedik**

	0-5 km	6-10 km	11-15 km	16+km	Totals / % Total
Agriculture	9	1	0	1	11 / 8.2%
Ritual	20	10	0	1	31 / 23.3%
Medical treatment	1	3	0	0	4 / 3%
Social	32	15	1	11	59 / 44.4%
Political	3	0	0	3	6 / 4.5%
Non-subsistence work activities	2	0	0	0	2 / 1.5%
Food products	10	0	0	2	12 / 9%
Non-food products	5	1	0	1	7 / 5.3
Other	1	0	0	0	1 / 0.8%
Totals / % Total	83 / 62.4%	30 / 22.6%	1 / 0.8%	19 / 14.2%	133 / 100%

People visited from other locations within five kilometers of Sungai Sedik, including Sungai Luar and Sungai Iring. There were eight visiting episodes, or 6.0 percent, from Sungai Luar including one visit to attend a government meeting and two episodes of *ngambe' ngabang*. There were also five episodes with social purposes, including one to visit ill kin, one for nocturnal courting, and an episode in which a woman returned home from an elopement. Only one visiting episode was associated with Sungai Iring, and this was to help with work on a building.

There were seven places located six to ten kilometers that people visited from. Visitors traveled from these locations for social purposes 15 times, including ten social visits, one episode of escorting kin, two episodes to attend cockfight, once to stop in on the way home, and once for nocturnal courting. Episodes of visiting were also associated with ritual purposes including eight episodes of travel to attend a ritual, one to request *pemali*, and one to attend a traditional Iban wedding. Other travel from locations in this category included three instances of travel for medical purposes such as requesting

magical and herbal medicines. There was also one instance of visiting to help with hill swidden work and one visit to fetch a pack, bush knife, and paint.

Visiting from locations 11 to 15 kilometers from Sungai Sedik was limited to one visit from an unspecified individual who attended a cockfight. People visited from ten locations that were 16 or more kilometers from the longhouse. The most common purpose for travel was for social reasons, including five episodes of social visiting, two of attending a cockfight, one of stopping in on the way home, one from a group of men away on *bejalai*, one of a group fetching their children for a holiday, and one to Pulau Melayu, an island in the lakes visited for recreational purposes. There were also three episodes of visiting to attend a government meeting, one to request permission to collect *garu* (resinous wood), and two of delivering uncooked rice. Also traveling from these locations was one group visiting for a school holiday and one individual visiting to help with hill swidden work.

Each visiting episode was related to a certain mode of transportation (Table 5). Traveling on foot was the most common, accounting for 78 episodes. Fifty-two of these episodes were visitors from locations within five kilometers of the longhouse. There were another 21 episodes by visitors traveling six to ten kilometers, and five episodes from 16 or more kilometers away. Travel by pick-up occurred in 26 of the visiting episodes with 18 of those episodes originating in locations within five kilometers of Sungai Sedik. Seventeen episodes were by motorcycle – 11 episodes within five kilometers and six episodes over 16 kilometers from Sungai Sedik. There were two episodes of travel by boat, both visiting from over 16 kilometers away. The one record of travel by bicycle was associated with someone visiting from a location six to ten

kilometers from Sungai Sedik. Other modes of transportation involved mixed means – by boat, by pick-up and on foot, on foot and by boat, and on foot and by motorcycle.

**Table 5: Mode of transportation related to visiting distance from Sungai Sedik**

Mode of transportation	0-5 km	6-10 km	11-15 km	16+ km	Totals / % Total
On foot	52	21	0	5	78 / 58.6%
Pick-up	18	6	1	1	26 / 19.5%
Motorcycle	11	0	0	6	17 / 12.8%
Boat	0	0	0	2	2 / 1.5%
Bicycle	0	1	0	0	1 / 0.8%
Pick-up and on foot	1	1	0	1	3 / 2.3%
Motorcycle and on foot	1	1	0	0	2 / 1.5%
Boat and on foot	0	0	0	4	4 / 3%
Totals / % Total	83 / 62.4%	30 / 22.5%	1 / 0.8%	19 / 14.3%	133 / 100%

The range frequencies of visiting episodes went from only once to visiting 11 times during the observation period. Visiting Sungai Sedik only one time during the observation period was the most common, occurring for 31 of the 55 visits, or 56 percent. There were eleven individuals or groups, or 20 percent, who visited twice during the year. Three individuals or groups visited three times each; three, visited four times each; and three, visited six times each. There was also one group that visited seven times; one, eight times; and one group, 11 times.

### **Gender and age**

#### Traveling

During the period of observation, 41 women engaged in 110 individual travel episodes and 40 men were involved in 57 individual travel episodes (Table 6).

Females Twenty-eight, or 25 percent, of the total female travel episodes directly involved females aged fifteen years or younger. There were six female travelers in this

age group, two of whom traveled six times each during the observation year. One individual traveled once; one, a total of two times; one individual, three times, and one individual, ten times. On average, individuals in this age group traveled 4.7 times per year.

Girls traveled for a variety of purposes. Eight of the travel episodes were in the social category and included visiting kin and attending cockfights. There were five episodes of travel for rituals, one medical episode of fetching a shaman, and two episodes for agricultural purposes (i.e., helping work on a hill swidden and fetching newly harvested rice). The primary reason for four of the episodes was to obtain food products, fetching pig meat once and collecting fruit three times. Overall, females from both age groups collected fruit products during four travel episodes, compared to males from both age groups who collected fruit during one travel episode. There was also one episode of traveling to get a school photo taken and six travel episodes to buy supplies.

Eighty-two, or 75 percent, of the female travel episodes directly involved females aged 16 years and older, of whom there were 25. Fifteen of these episodes occurred in the first month of observation, 18 in the second, 11 in the third, 13 in the fourth, 15 in the fifth, and ten in the sixth. Females in this age group traveled five kilometers or less from Sungai Sedik in 63 of the episodes (77%), six to ten kilometers in 13 of the episodes (16%), 11 kilometers in one episode (1%), and 16 kilometers or more in 5 (6%) of the episodes.

**Table 6: Male and female reasons for travel**

Category of travel purpose	# of Male travel episodes	Percent of males present (Table 1) that traveled	# of Female travel episodes	Percent of females present (Table 1) that traveled	Total travel episodes
Agriculture	4	25	10	33	14
Ritual	12	75	14	47	26

Medical treatment	2	13	13	43	15
Social	13	81	25	83	38
Political	3	19	-	-	3
Non-subsistence work activities	-	0	4	13	4
Food products	12	75	14	47	26
Non-food products	5	31	6	20	11
Other	6	38	24	80	30
Totals	57	-	110	-	167

Thirty-two percent of these women traveled only once; 28 percent, two times; and 16 percent, four times. There were two women who traveled six times each; one, three times; one, five times; one, eight times; and one, 16 times. The average number of travel episodes that individuals in this group participated in was 3.3 episodes. The woman who traveled 16 times throughout the observation period was also the one who traveled the most frequently out of all travelers, male and female.

Women traveled for 35 different reasons. Sixteen of the total episodes, or 20 percent, were associated with a social purpose. These episodes included leisure visiting, visiting ill kin, fetching an eloped daughter, and stopping in to visit kin on the way home. There were 14 episodes, or 17 percent, of traveling to buy supplies, one episode to get a school photo taken, and one episode to spin weaving thread. There were ten episodes, or 12 percent, of travel for rituals, including four episodes to attend an outside ritual, episodes to fetch a live pig and heirlooms, episodes to attend a Muslim ritual and a wedding, and an episode to lift mourning taboos. Among the 12 episodes, or 15 percent, of female travel for medical purposes were ten episodes of traveling for clinical medical care in Lanjak and two episodes associated with a shaman. Women were the main

travelers associated with clinical medical care, making up 83 percent of the total observed among both males and females of all ages.

Women participated in travel for NTFP activities including tapping rubber, selling rubber, buying *ai' cuka'*, and selling illipe nuts. Females were the only individuals participating in such activities, besides two males who sold rubber during two travel episodes. Women also traveled to obtain food products including episodes of buying salted and smoked fish, salting and smoking fish, fetching cassava roots, collecting maize, selling cassava roots and chickens, and delivering *berau*. There were also two other episodes of women traveling in order to obtain fish. Thus, women were the primary travelers in half of the travel episodes associated with obtaining fish. In contrast, women were also the only individuals to collect pandanus leaves for weaving, to pick up husbands' salaries, and to fetch goods and money sent by men on labor migration.

Males Eight males aged 15 years and younger traveled during the observation period. Five of the individuals traveled one time each, and three of the individuals participated in two travel episodes each. Boys traveled an average of 1.4 times per year.

There were seven purposes of travel associated with this age group. Traveling for ritual purposes was the most frequent reason for travel, with three episodes of traveling to attend Christian rituals. There were also two episodes of traveling to get school photos and one episode to fetch school supplies. Boys traveled two times for leisure visits and one time to attend entertainment. They also traveled to sell rubber and buy palm wine.

Forty-six of the travel episodes involved males aged 16 years and older. In this age group, six travel episodes occurred in the first month of observation, 11 in the second, ten in the third, five in the fourth, eight in the fifth, and six in the final. Men

traveled 32 times to destinations that were within five kilometers of Sungai Sedik, seven times to destinations six to 11 kilometers away, two times to a destination 12 kilometers away, and five times to destinations over 16 kilometers away. There were 16 men who traveled during the observation period. They most commonly participated in only one travel episode during the year, which made up 31 percent of the total travel episodes. Twenty-five percent of these men traveled three times, and 19 percent participated in two travel episodes. There were two individuals who participated in five travel episodes each; one, four times; and one, nine times. The average number of episodes that men traveled was approximately three times.

Men most frequently traveled for food collecting purposes (24 percent of all episodes). These included three episodes of fishing; two episodes of hunting; separate episodes of buying salted fish, *berau*, and palm wine; separate episodes of fetching fish and pig feed; and one episode of collecting fruit. There were nine total ritual travel episodes – seven travel episodes to attend outside rituals, one episode to request *pemali*, and one episode to send invitations to attend a ritual. Other reasons for travel that only men engaged in were attending a government meeting, sawing lumber, buying parts for a chainsaw, fetching a shotgun, and escorting kin. Men were also the only ones to build a field hut and fetch a pick-up to haul in newly harvested rice. This group also traveled for leisure visits, to visit ill kin, for clinical medical care, to attend cockfights, to fetch a chainsaw, and to sell rubber.

As seen in Table 4, the ratio of travel episodes for males and females to the number of males and females present demonstrates that males and females were traveling about equally for some reasons and more or less for other reasons. Males and females

traveled about the same amount for social and agricultural reasons, while females traveled more frequently than men for medical treatment, non-subsistence work activities, and for other activities such as buying supplies. Men traveled more frequently than women for ritual and political reasons and to obtain food products.

### Visiting

Females There were 23 visiting episodes, or 17.3%, involving individual females or all-female groups. Eleven females, either individuals or groups, visited during the observation period. Six individuals and one group visited only one time each, making up over half of the total female population, but only 30.4 percent of the total visiting episodes. Two individuals each visited Sungai Sedik twice, comprising 17.4 percent of the visiting episodes. There was also one group and one individual that visited six times each, equaling over half of the total episodes. During the first month of observations, three females visited Sungai Sedik; three female visiting episodes occurred during the second month, four during the third, and three during the fourth. During the fifth month, there were six visiting episodes, and during the final month of observations, there were four visiting episodes. Females visited from places within five kilometers of Sungai Sedik for 21 of the episodes and from locations six to ten kilometers for two episodes (Table 7).

**Table 7: Visitor category and the distance of travel to Sungai Sedik**

	0-5 km	6-10 km	11-15 km	16+ km	Totals / %Total
Males	15	8	0	5	28 / 21.1%
Females	21	2	0	0	23 / 17.3%
Males and females	39	10	0	7	56 / 42.0%
Unspecified	8	10	1	7	26 / 19.6%
Totals / % Total	83 / 62.4%	30 / 22.6%	1 / 0.7%	19 / 14.3%	133

Females visited Sungai Sedik for 15 different purposes (Table 8). Visiting for ritual purposes was the most common – five visits during a school holiday, one visit to attend a traditional ritual, one to attend a Christian ritual, one visit to attend a traditional Iban wedding ceremony, and one to collect an heirloom. Females also traveled to Sungai Sedik for social purposes, such as social visiting, visiting ill kin, stopping in on the way home, and returning home after an elopement. There were four episodes of visiting associated with food products – three episodes to fetch uncooked rice and one to collect fruit. Three of the visiting episodes were for agricultural purposes such as checking on swidden fields and being paid to harvest rice. Other reasons for visiting were to fetch a worker and to request herbal medicine.

Males Twenty-eight of the visiting episodes, or 21.1 percent, were associated with male individuals or all-male groups. There were 20 males or groups of males that traveled during the observation year. Fourteen of these males traveled only once during the year. Three male individuals and one all-male group traveled twice each, and one individual and one group traveled three times each. Four of these episodes occurred in the first month of observations, nine in the second, four in the third, four in the fourth, four in the fifth, and three in the sixth. Males traveled five kilometers or less to visit Sungai Sedik in 15 of the episodes, six to ten kilometers in eight of the episodes, and 16 or more kilometers in five of the episodes (Table 7).

Males visited Sungai Sedik for a variety of purposes (Table 8). Fourteen of the visiting episodes were for social reasons – six episodes of social visiting, three instances of stopping in on the way home, three visits for nocturnal courting, one visit to see ill kin, and one episode to escort kin. There were nine episodes of visiting associated with

rituals – five visits to attend a ritual, two of sending invitations to attend a ritual, one to request ritual compensation, and one for the Christmas holiday. Visiting associated with non-food products included requesting permission to collect *garu* and delivering an implement. Males also visited in order to help with hill swidden work, work on a building, and provide medical care.

Males and Females Mixed groups of males and females visited Sungai Sedik during 56 separate episodes or 42.1 percent of the total visiting episodes. During the first month of observations, groups in this category visited nine times; during the second month, ten times; and during the third month, seven times. There were ten episodes of visiting in month four, 13 in month five, and seven in the final month.

Male and female groups visited 39 times from locations within five kilometers of Sungai Sedik. There were also 10 visits from groups that traveled six to ten kilometers and seven episodes from locations over 16 kilometers (Table 7).

Fourteen separate groups of males and females visited at least once during the observation year. Three of these groups visited one time each; three groups, two times; one group, three times; and three groups, four times. Among the other groups, one visited for six of the episodes, one visited for seven, and one visited eight times. One group visited Sungai Sedik during 11 separate episodes, comprising close to 20 percent of the total visiting by mixed female and male groups.

These mixed-gender groups visited the longhouse for 22 different purposes (Table 8). There were 23 visiting episodes associated with the social purpose category, including ten episodes of social visiting, five episodes of stopping in on the way home, two visits to attend a cockfight, and two visits to escort kin. In this category, there was

also one episode to leave children with kin, another to play with other children, one episode to visit from a *bejalai* trip, and one visit to fetch children for a holiday. Male and female groups also visited for ritual reasons such as attending a traditional ritual, attending a Christian ritual, and visiting for a school holiday. These groups also visited the longhouse to help with hill swidden work during six episodes, mill rice twice, and fix a padi miller once. Other visiting episodes included attending government meetings; helping make a coffin; fetching a pack, bush knife, and paint; going hunting; fetching and delivering milled rice; and delivering smoked meat.

**Table 8: Individual and group purposes for travel**

Category of travel purpose	Male episodes	Female episodes	Male/Female episodes	Unspecified episodes	Totals / % Total
Agriculture	1	2	9	0	12 / 9.0%
Ritual	9	9	9	4	31 / 23.3%
Medical Treatment	1	1	0	2	4 / 3.0%
Social	14	6	23	14	57 / 42.8%
Political	0	0	1	5	6 / 4.5%
Non-subsistence work activities	1	1	1	0	3 / 2.3%
Food products	0	4	7	1	12 / 9.0%
Non-food products	2	0	5	0	7 / 5.3%
Other	0	0	1	0	1 / 0.8%
Totals / % Total	28 / 21.1%	23 / 17.3%	56 / 42.1%	26 / 19.5%	133

Unspecified Groups and Individuals Individuals and groups, whose identities were not specified at the time of data collection, visited Sungai Sedik a total of 26 times, or 19.6 percent of the total visiting episodes. During the first and second months, there were seven episodes of visiting. There were five visiting episodes during the third month and three episodes during the fourth month. Visiting for this category slowed down during the fifth and sixth month, with two visits per month recorded.

Unspecified groups and individuals visited from locations within five kilometers of Sungai Sedik for eight of the episodes. There were also ten visiting episodes from locations six to ten kilometers. The only visiting episode associated with traveling 11 to 15 kilometers was also in this category and was by an individual. Seven instances of visiting involved travel from locations 16 or more kilometers from Sungai Sedik (Table 7).

Visitors in this category traveled to Sungai Sedik for 11 different purposes (Table 8). Five of these purposes were associated with the social category including seven episodes for social visiting, three visits to attend a cockfight, two instances of stopping in on the way home, one episode of nocturnal courting, and one episode of visiting Pulau Melayu. There were five episodes of attending a government meeting, one of which involved government officials visiting the longhouse. Visiting for ritual reasons included attending a traditional ritual, requesting *pemali*, and attending a traditional wedding. Also associated with this category of visitors were two episodes of requesting magical medicine and one visit to sell salted fish.

### **Seasonality**

#### Traveling

The time of year was an important factor in the types and frequencies of travel episodes that took place (Table 9). During the first month, there were five travel episodes associated with obtaining food products (Table 10). These purposes were to fetch fish, buy salted and smoked fish, fetch pig meat, and sell cassava roots and chickens. There were six episodes of traveling to obtain non-food products, including one episode to saw lumber and five episodes to collect pandanus leaves for weaving. Three travel episodes

during this month were for medical care, and four episodes were trips to Lanjak for school photos. Two episodes were associated with agriculture and NTFP collection – fetching a pick-up to haul in newly harvested rice and selling rubber.

**Table 9: Travel episodes by month**

Month	# of Episodes	%
April/May 1993	29	17
June/July 1993	37	22
Aug/Sept 1993	25	15
Oct/Nov 1993	21	13
Dec/Jan 1993-94	36	22
Feb/March 1994	19	11
Totals	167	100

The second month was one of two months with the most travel episodes. Sixty-two percent of travel episodes associated with rituals occurred during this month. There were twelve episodes of traveling to attend an outside ritual, one episode of travel with the purpose of *ngambe' ngabang*, one episode for *ngetas ulit*, one individual traveling to attend a church wedding, and one episode to fetch a live pig. Seven individuals traveled with the purpose of visiting, one individual traveled to fetch a shaman, and another traveled to fetch a chainsaw. There were six episodes of travel to buy supplies and six episodes to acquire food – three episodes to collect fruit, one to catch fish, one to salt and smoke fish, and one to buy salted fish.

In the third month there were a total of 25 travel episodes. There were eight episodes of social travel – four visiting episodes, two episodes of visiting ill kin, one to attend a cockfight, and episode to see a music band for entertainment. Individuals also traveled five times for agricultural and NTFP reasons including two times to help with hill swidden labor, two times to sell illipe nuts, and one time to sell rubber. Reasons for

travel associated with food products included three travel episodes to catch fish, one episode to collect fruit, and one trip to buy *berau*. Other travel episodes included two visits to receive clinical medical care, two trips to buy supplies, one episode to fetch a shotgun, another to attend a government meeting, and one episode to request *pemali* (ritual compensation).

During the fourth month of travel observations, 33 percent of travel episodes were associated with social purposes. These included four episodes of visiting, two episodes of visiting ill kin, and one trip to check in on a relative's house. Ritual reasons for travel included one trip to fetch a live pig, one episode of attending a traditional ritual, and one trip to fetch heirlooms. There were two episodes of travel associated with agriculture – one episode to build a field hut and another to fetch newly harvested rice. Individuals also traveled twice to buy supplies, once to fetch school supplies, three times for non-traditional medical care, and once to fetch goods or money sent by men on labor migration. There was also one travel episode of hunting and one to fetch cassava roots.

The fifth month of observations saw 36 travel episodes. Nineteen percent of these episodes were for social reasons including four travels to attend a cockfight, one social visit, one individual who stopped by a kin's house on the way home, and one episode with the purpose of escorting kin. Travel related to food purposes was also 19 percent of the total travel for this month and included one episode each of hunting, fetching fish, fetching pig feed, collecting fruit, collecting maize, delivering *berau*, and buying palm wine. There were four travel episodes for attending a Christian ritual, all of which occurred on or around December 25. Fourteen percent of travel this month was done with the purpose of buying supplies. Travel for agricultural purposes that occurred

during this month included one travel episode to help work on a hill swidden, two to buy *ai' cuka'*, and one to tap rubber. There were four episodes of travel for medical purposes, two of which were for clinical medical care, one episode to fetch a shaman, and another for shamanic treatment. Three of the episodes this month were related to non-food products – one episode of buying parts for a chainsaw, one to fetch a chainsaw, and another to saw lumber. These last two episodes involved the same individual, with the chainsaw being fetched from Sawah one day before the individual returned to Sawah to saw lumber. There were also two episodes related to non-subsistence work activities – one travel episode to pick up a salary and another to fetch goods and money sent by men on labor migration.

During the final month of observations there were 19 travel episodes. Twenty-six percent of these episodes were related to social travel, including two episodes to visit, two to visit ill kin, and one to fetch an eloped daughter. Two episodes to Lanjak, on the same day, were to attend a Muslim ritual. There were also two episodes of travel to receive clinical medical care and two episodes to attend a government meeting. Thirty-one percent of travel this month was to buy supplies. Individuals also traveled once to sell rubber and once to buy palm wine.

**Table 10: Number of travel episodes by month per category of purpose**

Category of Purpose -subcategories for purpose*	April/May 1993	June/July 1993	Aug/Sept 1993	Oct/Nov 1993	Dec/Jan 1993-94	Feb/March 1994	Total number of travel episodes	% of total travel episodes
<b>Agriculture</b>	<b>2</b>	-	<b>5</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>14</b>	<b>8.8</b>
-Rice Farming	1	-	2	2	1	-	6	
-Cash Crops	1	-	3	-	3	1	8	
<b>Ritual</b>	<b>-</b>	<b>16</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>26</b>	<b>15.5</b>
-Traditional	-	15	1	3	-	-	19	
-Non-Traditional	-	1	-	-	4	2	7	
<b>Medical</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>15</b>	<b>8.9</b>

<b>Treatment</b>								
-Traditional	-	1	-	-	2	-	3	
-Clinical	3	-	2	3	2	2	12	
<b>Social</b>	<b>4</b>	<b>7</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>38</b>	<b>22.7</b>
-Kin	-	-	2	3	2	3	10	
-Leisure	4	7	6	4	5	2	28	
<b>Political</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>3</b>	<b>1.8</b>
<b>Non-Subsistence Work Activities</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>4</b>	<b>2.4</b>
-Wage Labor	1	-	-	1	2	-	4	
-Other Work	0	-	-	-	-	-	0	
<b>Food Products</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>1</b>	<b>26</b>	<b>15.5</b>
-NTFPS	4	6	4	1	4	1	20	
-Agricultural	1	-	1	1	3	-	6	
<b>Non-Food Products</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>11</b>	<b>6.5</b>
-Implements	-	1	1	-	2	-	4	
-Forest Products	6	-	-	-	1	-	7	
<b>Other</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>30</b>	<b>17.9</b>
<b>Totals</b>	<b>29</b>	<b>37</b>	<b>25</b>	<b>21</b>	<b>36</b>	<b>19</b>	<b>167</b>	<b>100</b>

\*Subcategory totals are provided in order to further detail the category totals.

### Visiting

The types and frequency of visiting were often related to the time of year during which they happened (Table 11). During the first month of observations, over half of the visiting episodes involved a social purpose (Table 12). There were six episodes for social visiting, five episodes of attending a cockfight, one episode of nocturnal courting, one visit to leave kids with kin, and one individual returning home from an elopement. Three visiting episodes associated with rituals were one visit to attend a ritual and two visits for

a school holiday. People also visited during this month to help with work on a building and to fetch a worker. Other reasons for visiting included to mill rice, to request magical medicine, to attend a government meeting, and fetch a pack, bush knife, and paint.

**Table 11: Visiting episodes by month**

Month	# of Episodes	%
Month 1 (April/May 1993)	23	17.3
Month 2 (June/July 1993)	29	21.9
Month 3 (Aug/Sept 1993)	20	15.0
Month 4 (Oct/Nov 1993)	20	15.0
Month 5 (Dec/Jan 1993-94)	25	18.8
Month 6 (Feb/March 1994)	16	12.0
Totals	133	100

The second month was the period with the most visiting episodes. Fifty-eight percent of the total visiting episodes associated with a ritual purpose occurred during this month. There were 13 episodes of visiting for a ritual, two visits to send invitations to attend a ritual, and two visits to attend a traditional Iban wedding. Seven episodes of visiting were for social visiting, one individual visited for nocturnal courting, another visited Pulau Melayu, and one group visited to leave their kids with kin. There was also one visit to request magical medicine, and another to attend a government meeting.

In the third month of observations, there were a total of 20 visiting episodes. Seven of those visits were for social purposes including social visiting, stopping in on the way home, and nocturnal courting. There were also four episodes of visiting to help with hill swidden work, making up 67 percent of the total visits with an agricultural purpose. Ritual reasons for travel included two visits for a school holiday and one visit to request *pemali*. Of the three visiting episodes associated with food products, two visits were

made to fetch milled rice and another was to deliver smoked meat. Other episodes included one visit to deliver an implement and another to attend a government meeting.

During the fourth month, there were 11 episodes with social purposes including six episodes of social visiting, four visits to stop in on the way home, and one episode of escorting kin. Five of the visiting episodes were associated with food products. Two of these visits were to fetch unmilled rice, one visit involved delivering milled rice, another visit was to collect fruit, and one group visited to go hunting. Other travelers visited Sungai Sedik during this month to request herbal medicine, help make a coffin, and collect heirlooms.

**Table 12: Number of visiting episodes per category of purpose**

Category of Purpose -subcategories for purpose*	Total number of travel episodes	% of total travel episodes
<b>Agriculture</b>	<b>11</b>	<b>8.3</b>
-Rice Farming	11	
-Cash Crops	0	
<b>Ritual</b>	<b>31</b>	<b>23.3</b>
-Traditional	21	
-Non-traditional	10	
<b>Medical Treatment</b>	<b>4</b>	<b>3.0</b>
-Traditional	3	
-Clinical	1	
<b>Social</b>	<b>59</b>	<b>44.4</b>
-Kin	32	
-Leisure	27	
<b>Political</b>	<b>6</b>	<b>4.5</b>
<b>Non-Subsistence Work Activities</b>	<b>2</b>	<b>1.5</b>
-Wage Labor	0	
-Other Work	2	
<b>Food Products</b>	<b>12</b>	<b>9.0</b>
-NTFPS	4	
-Agricultural	8	
<b>Non-Food Products</b>	<b>7</b>	<b>5.3</b>
-Implements	6	

-Forest Products	1	
Other	1	0.7
Totals	133	100

\*Subcategory totals are provided in order to further detail the category totals. Only the main category totals are included in the total number of travel episodes.

The fifth month saw 25 visiting episodes. Nine of these visits were for social reasons – two episodes of social visiting, four episodes of stopping in on the way home, one visit to see ill kin, another to play with other kids, one visit to escort kin, and one episode of visiting from a *bejalai* trip. There were four episodes of visiting associated with rituals such as school holidays and attending Christian rituals. Visitors also traveled to Sungai Sedik this month to request permission to collect *garu*, provide medical care, attend a government meeting, and fetch a bush knife, pack, and paint. Agricultural reasons for visiting included both fetching and delivering uncooked rice and milling rice.

During the sixth month, there were sixteen episodes of visiting recorded. Forty-four percent of these episodes involved a social purpose. There were three episodes of social visiting, one visit made to ill kin, one episode of escorting kin, one visit for nocturnal courting, and one visit to fetch children for a holiday. Forty-five percent of the total visiting episodes associated with agricultural purposes occurred this month. These included visits to help work on a hill swidden, to check on swidden, to harvest rice for money, and to fix a padi miller. Ritual episodes this month included visiting Sungai Sedik to request *pemali* and one visit to the longhouse during a school holiday. Other visiting this month included attending a government meeting and selling salted fish.

## **Kin**

### Traveling

Four main kin types were observed between the individuals traveling and the individuals contacted at their destination, including close kin, distant kin, ambiguous kin and non-kin (Table 13). Eighty-six, or 51.5 percent, of the travel episodes were associated with a close kin type, 15, or 8.9%, were associated with distant kin, 40, or 23.9%, were associated with ambiguous kin, and twenty-six or 15.57 percent, were associated with non-kin.

**Table 13: Number of travel episodes per kin type**

Kin Categories -subcategories*	# of travel episodes	% of specific kin type	% of total travel episodes
<b>Close Kin</b>	<b>86</b>	<b>100</b>	<b>51.5</b>
- cousin	39	45.35	23.35
- sibling	16	18.6	9.58
-affine (HZ/HB)	9	10.47	5.39
-sibling's child	8	9.3	4.79
-parent's sibling	6	6.98	3.59
-parent	3	3.49	1.8
-child	3	3.49	1.8
-daughter's husband	1	1.16	0.6
-father/father's brother	1	1.16	0.6
<b>Distant Kin</b>	<b>15</b>	<b>100</b>	<b>8.98</b>
-child's spouse's parent	7	46.7	4.19
-mother's cousin	5	33.3	2.99
-ZH's parent ("M")	2	13.3	1.2
-wife's father's brother	1	6.7	0.6
<b>Ambiguous Kin</b>	<b>40</b>	<b>100</b>	<b>23.95</b>
-distant kin or friend	16	40.0	9.58
-metaphorical parent	9	22.5	5.39
-metaphorical sibling	7	17.5	4.19
-metaphorical child	7	17.5	4.19
-metaphorical grand father	1	2.5	0.6
<b>Non-kin</b>	<b>26</b>	<b>100</b>	<b>15.57</b>
<b>Totals</b>	<b>167</b>	<b>-</b>	<b>100</b>

\*Subcategories are provided in order to further detail the four main kin types.

The close kin types included parent, sibling, child, parent's sibling, cousin, father/father's brother, affine (husband's sister or husband's brother), daughter's husband, and sibling's child. There were 39 episodes of travel to visit a cousin, making up 45.4 percent of travel associated with close kin and 23.4 percent of all travel. This kin

type was most frequently associated with travel from Sungai Sedik. Sixteen, or 18.6, of the close kin travel episodes involved a sibling relationship. The affine and parent's sibling kin types made up 10.5 percent and 9.3 percent of the close kin travel episodes, respectively. The remaining five close kin types were associated with 16.3 percent of the close kin travel, ranging in travel frequency from one to six episodes.

Close kin types were associated with approximately half of the travel episodes made to destinations within five kilometers of Sungai Sedik (Table 14). Within the close kin category, 75.6 percent of travel was within five kilometers. Also in this category, 13.9 percent of travel was to destinations six to ten kilometers from Sungai Sedik. Approximately one percent of the episodes were associated with travel 11 to 15 kilometers away, and 9.3 percent of travel involved destinations 16 or more kilometers away.

**Table 14: Kin type and distance of destination from Sungai Sedik**

	Close Kin	Distant Kin	Ambiguous Kin	Non-Kin	Totals
0-5 km	65	11	33	19	128
6-10 km	12	3	3	5	23
11-15 km	1	-	2	-	3
16+ km	8	1	2	2	13
Totals	86	15	40	26	167

Within the close kin category, there were numerous purposes associated with travel (See Table 15). Twenty-seven episodes, or 31.4 percent, were done for social reasons, including 16 episodes with the purpose of visiting. Just over 15 percent, or 13 episodes, of travel were for religious reasons with 46 percent of this particular travel done in order to attend a ritual. There were also 13 episodes of travel associated with food products, including two separate episodes for buying smoked fish and palm wine and the

other 11 episodes for fetching pig meat, fish, and cassava tubers, collecting fruit and maize, hunting, and catching fish.

There were four types of distant kin relationships including child’s spouse’s parent, mother’s cousin, sister’s husband’s parent, and wife’s father’s brother. Forty-six percent of the distant kin travel episodes were associated with a child spouse’s parent. Five of the distant kin travel episodes, or 33 percent, involved a mother’s cousin, two episodes involved a sister’s husband’s parent, and one episode involved a wife’s father’s brother. Travel involving distant kin to destinations within five kilometers of Sungai Sedik accounted for 11 of the 15 travel episodes, or 73 percent. Three of the travel episodes, or 20 percent, were to destinations six to ten kilometers away, and one episode, or 7 percent, was traveled to a destination sixteen or more kilometers from the longhouse. There were no travel episodes involving both distant kin and destinations 11 to 15 kilometers from Sungai Sedik.

The distant kin travel episodes involved nine different purposes for travel. The category of purposes labeled “other” comprised 26.7 percent of the distant kin travel including two episodes to buy non-food supplies and two episodes for a school photo. Six percent of the distant kin episodes were traveled in order to obtain food products; one episode to catch fish. There were also five episodes involving social purposes – four episodes of visiting and one to fetch an eloped daughter. Traveling for ritual purposes made up 26.6 percent of the distant kin travel – two episodes for *ngabang*, two to attend a Muslim ritual, and one to attend a Christian ritual. There was also one episode, or 6.7 percent, to sell rubber and one episode (6.7%) with the purpose of receiving medical care.

**Table 15: Purposes by kin type**

Category of Purpose -subcategories for	Close Kin	Distant Kin	Ambiguous Kin	Non-Kin	Total number of travel episodes	% of total travel episodes
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purpose						
<b>Agriculture</b>	<b>8</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>14</b>	<b>8.8</b>
-Rice Farming	5	-	1	-	6	
-Cash Crops	3	1	2	2	8	
<b>Ritual</b>	<b>13</b>	<b>4</b>	<b>7</b>	<b>2</b>	<b>26</b>	<b>15.5</b>
-Traditional	11	2	5	1	19	
-Non-Traditional	2	2	2	1	7	
<b>Medical Treatment</b>	<b>6</b>	<b>-</b>	<b>8</b>	<b>1</b>	<b>15</b>	<b>8.9</b>
-Traditional	-	-	3	-	3	
-Clinical	6	-	5	1	12	
<b>Social</b>	<b>27</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>38</b>	<b>22.7</b>
-Kin	7	1	1	1	10	
-Leisure	20	4	3	1	28	
<b>Political</b>	<b>1</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>3</b>	<b>1.8</b>
<b>Non-Subsistence Work Activities</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>2.4</b>
-Wage Labor	1	-	1	2	4	
-Other Work	0	-	-	-	0	
<b>Food Products</b>	<b>13</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>26</b>	<b>15.5</b>
-NTFPS	11	1	2	6	20	
-Agricultural	2	-	4	-	6	
<b>Non-Food Products</b>	<b>10</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>11</b>	<b>6.5</b>
-Implements	4	-	-	-	4	
-Forest Products	6	-	1	-	7	
<b>Other</b>	<b>7</b>	<b>4</b>	<b>8</b>	<b>11</b>	<b>30</b>	<b>17.9</b>
<b>Totals</b>	<b>86</b>	<b>15</b>	<b>40</b>	<b>26</b>	<b>167</b>	<b>100</b>

“Ambiguous” was the third type of kin relationship. These involved metaphorical (kin ties where the exact kinship links were not specified but were guessed by general kin terms) parent, child, sibling, grandfather, and distant kin or friend. Nine of the

ambiguous kin episodes, or 22.5 percent, involved a metaphorical parent. The metaphorical sibling and metaphorical child relationships were each associated with seven travel episodes, or 17.5 percent for each type. There was one episode of travel involving a metaphorical grandfather relationship. Thirty-three, or 82.5 percent, of the ambiguous kin travel episodes were within five kilometers of Sungai Sedik. There were three episodes, or 7.5 percent, where travel involved ambiguous kin six to ten kilometers from the longhouse. Two episodes, or five percent, were traveled to destinations 11 to 15 kilometers away and two episodes were traveled 16 or more kilometers in distance.

There were several purposes associated with travel that involved ambiguous kin relationships. The most frequent reasons for travel involving this category of kin type were to seek medical care and to buy supplies. There were eight travel episodes, or 20 percent, within the medical category including five episodes for medical care, two to fetch a shaman, and one of receiving medical treatment. Seven episodes, or 17.5 percent, of travel were for ritual purposes including four instances of travel for *ngabang*, one to attend a wedding, one to fetch heirlooms, and one to attend a Christian ritual. There were six episodes, or 15 percent, of travel to sell, catch, buy, and deliver food products, one to fetch goods and money send from *bejalai*, and one to collect pandanus leaves. Two episodes of travel associated with ambiguous kin were to attend a political meeting. Travel for agricultural/NTFP purposes included one episode to fetch a pick-up to haul newly-harvested rice and two to sell rubber. There were also three episodes traveled for social purposes – two episodes to attend a cockfight, one for a social visit, and one to escort kin.

There were 26 travel episodes associated with a non-kin relationship. Seventy-three percent of these episodes were traveled to distances within five kilometers of Sungai Sedik. Five episodes, or 33.3% were traveled to distances six to ten kilometers from the longhouse and two episodes were traveled to distances over sixteen kilometers from the longhouse. No travel episodes involving non-kin relationships were traveled to destinations 11 to 15 kilometers from the longhouse.

There were 16 different purposes associated with non-kin traveling. Residents traveled from Sungai Sedik during nine episodes, or 34.6% of non-kin travel, to buy supplies. There were also two episodes of travel for school photos and one to fetch school supplies. There were two episodes, or 13.3%, to pick up salaries and one episode, or 6.7%, to receive medical care. There were two episodes of travel related to cash crops including one to buy *ai' cuka'* and one to sell illipe nuts. Non-kin relationships were also associated with traveling related to food products. These travels included two episodes of buying salted fish and one episode each for salting and smoking fish, catching fish, fetching fish, and collecting fruit. Additional reasons for non-kin travel included requesting *pemali*, attending a Muslim ritual, attending a cockfight, and visiting ill kin.

### Visiting

As with the traveling dataset, there were four main kin types observed between the individuals and groups visiting Sungai Sedik and the *bilik* that they visited at the longhouse (Table 16). Eighty-four visiting episodes, or 63.2 percent, were associated with a close kin relationship. There were 10 episodes, or 7.5 percent, involving distant

kin relationships, 28 episodes, or 21.0 percent, associated with ambiguous kin relationships, and 11 episodes, or 8.3%, involving non-kin relationship.

The close kin types that were observed in the visiting dataset were child, sibling, cousin, parent's sibling, sibling's child, sibling and child, affine (husband's sister or husband's brother), *menantu* (child's spouse), child and their spouse, and *entua* (spouse's parent). There were 20 episodes associated with visiting a child, making up 23.8 percent of the visiting in the close kin category. Seventeen episodes, or 20.2 percent of the close kin visits, were associated with visiting a sibling, and there were also 17 visiting episodes associated with visiting a cousin. The affinal kin relationship was involved in nine of the visiting episodes, or 10.7 percent, and the relationship of sibling's child was prevalent in only seven of the visiting episodes, or 8.3 percent. Six of the episodes, or 7.1 percent, involved visiting a child's spouse and two of the episodes, or 2.4 percent, involved visiting a spouse's parent. The other two close kin groupings, child/child's spouse and sibling/child were involved in two and one episode(s) respectively.

There were 53 episodes of visits from locations within five kilometers of the longhouse, making up 63.1 percent of the total visiting associated with close kin. Twenty visiting episodes, or 23.8 percent, involved traveling from locations six to ten kilometers from the longhouse, and 11 visiting episodes, or 13.1 percent, were traveled over sixteen kilometers. There were no close kin individuals or groups who visited from locations distanced 11 to 15 kilometers from Sungai Sedik.

There were several purposes associated with close kin visiting. Forty of the episodes involved social purposes, making up almost 48 percent of the visits from close kin. These included 21 episodes of social visiting, eight episodes of stopping in on the

way home, three visits to attend a cockfight, and three episodes of escorting kin. Visiting ill kin, leaving kids with kin, visiting from a *bejalai* trip, returning from an elopement, and fetching children for a holiday were also associated with social close kin visiting. Sixteen of the close kin visiting episodes, or 19.1 percent, were associated with ritual purposes. Seven of these episodes were visits to attend a traditional ritual, six episodes were visits during a school holiday, and one episode was to attend a Christian ritual. Other ritual visits involved sending invitations for a future ritual and requesting ritual compensation (*pemali*).

Close kin visiting associated with food purposes included six episodes of fetching milled rice, two episodes of delivering milled rice, one visit for hunting, and one episode of delivering smoked meat. There were nine episodes of visiting for agricultural purposes such as helping with hill swidden work during six separate visits, milling rice twice, checking on swidden, and fixing a padi miller. Visiting involved with non-food items comprised five episodes including delivering an implement and fetching a bush knife, pack, and paint. Other episodes included fetching a worker, requesting herbal medicine, helping make a coffin, and visiting to provide medical care.

There were five types of distant kin involved with the visiting episodes. These were child's spouse's parent, wife's father's brother, cousin's child, husband's brother's child, and sibling/cousin/affine. There was one visiting episode involving a sibling/cousin/affine relationship. Half of the distant kin visits involved a cousin's child. There were also two visits involving a child's spouse's parent and one visit from a wife's father's brother and a husband's brother.

Visits involving distant kin from locations within five kilometers of Sungai Sedik accounted for 9 of the 10 episodes, or 90 percent. The remaining travel episode was from a location six to ten kilometers from the longhouse. There were no visiting episodes involving both distant kin and travel between 11 and 15 kilometers or over 16 kilometers.

There were eight different purposes associated with distant kin visiting. Three of the purposes were social such as social visiting, visiting ill kin, and playing with other kids. Visits for ritual purposes included attending traditional rituals, visiting during school holidays, and attending a traditional wedding. Other reasons for travel involving distant kin were to collect fruit and help work on a hill swidden.

The four types of ambiguous relationships recorded were metaphorical sibling, metaphorical parent, distant kin or friend, and acquaintance. Fifteen visiting episodes, 53.4 percent of the ambiguous kin episodes, involved a distant kin or friend relationship. There were six episodes associated with a metaphorical sibling and five episodes associated with an acquaintance. The metaphorical parent kin type was present in two of the visiting episodes.

**Table 16: Number of visiting episodes per kin type**

Kin Categories -subcategories*	# of visiting episodes	% of specific kin type	% of total visiting episodes
<b>Close Kin</b>	<b>84</b>	<b>100</b>	<b>63.2</b>
-child	20	23.8	15.0
-sibling	17	20.2	12.8
-cousin	17	20.2	12.8
-affine (HZ/HB)	9	10.8	6.7
-sibling's child	7	8.3	5.3
-parent's sibling	3	3.6	2.3
-child's spouse	6	7.1	4.6
-spouse's parent	2	2.4	1.5
-child, child's spouse	2	2.4	1.5
-child, sibling	1	1.2	0.7
<b>Distant</b>	<b>10</b>	<b>100</b>	<b>7.5</b>
-cousin's child	5	50.0	3.7
-child's spouse's parent	2	20.0	1.5
-WFB	1	10.0	0.8
-HB's child	1	10.0	0.8
-sibling, cousin, affine	1	10.0	0.8

<b>Ambiguous</b>	<b>28</b>	<b>100</b>	<b>21.0</b>
-metaphorical sibling	6	21.4	4.5
-metaphorical parent	2	7.1	1.5
-distant kin or friend	15	53.6	11.3
-acquaintance	5	17.9	3.7
<b>Non-Kin</b>	<b>11</b>	<b>100</b>	<b>8.3</b>
<b>Totals</b>	<b>133</b>	<b>-</b>	<b>100</b>

\*Subcategories are provided in order to further detail the four main kin types. Only the main category totals are included in the total number of visiting episodes and total percentage of travel episodes.

There were 16 episodes of visiting (associated with ambiguous kin relationships) from locations within five kilometers of Sungai Sedik (Table 17). Seven of the ambiguous kin visiting episodes were from locations six to ten kilometers from the longhouse. The only episode of visiting from a location 11 to 15 kilometers away also involved an ambiguous kin relationship. Four of the visiting episodes in this kin category were associated with traveling 16 or more kilometers.

**Table 17: Kin type and distance of travel to Sungai Sedik**

	Close Kin	Distant Kin	Ambiguous Kin	Non-Kin	Totals / % Totals
0-5 km	53	9	16	5	83 / 62.4%
6-10 km	20	1	7	2	30 / 22.6%
11-15 km	0	0	1	-	1 / 0.7%
16+ km	11	-	4	4	19 / 14.3%
Totals / % Totals	84 / 63.2%	10 / 7.5%	28 / 21.0%	11 / 8.3%	133

Of the 28 visiting episodes involving ambiguous kin, 11 episodes, or 39.3%, were associated with social purposes – four episodes of social visiting, two visits to attend a cockfight, three episodes of stopping in on the way home, and two episodes of nocturnal courting. There were also ten episodes with ritual purposes – four episodes to attend a traditional ritual, two visits to attend a Christian ritual, one visit to send invitations to a ritual, one visit to request ritual compensation, one to collect heirlooms, and one episode

to attend a traditional Iban wedding. Other visiting episodes involving ambiguous kin included attending a government meeting, requesting magical medicine, being paid to harvest rice, fetching a bush knife, pack, and paint, and requesting permission to collect *garu*. There was also one episode in this category with an unspecified purpose.

There were 11 episodes of visiting associated with a non-kin relationship. Five of these episodes, or 45.5%, were associated with visiting from locations within five kilometers of Sungai Sedik. There were also two episodes, or 18.2%, from locations six to ten kilometers from the longhouse and four episodes, or 36.3%, from locations sixteen or more kilometers from the longhouse. There were no visiting episodes associated with non-kin and locations 11 to 15 kilometers from the longhouse.

During the observation period non-kin visited the longhouse for six different purposes. The most frequent reason for visiting was to attend a government meeting which occurred five times, or for 45.5% of the episodes. There were also two episodes, or 18.2%, for nocturnal courting and one episode each for visiting *Pulau Melayu*, stopping in on the way home, requesting magical medicine, and stopping in on the way home.

## **Exchange**

### Traveling

Purposes associated with the travel episodes often involved an individual executing some type of exchange (Appendix C). The purposes were divided into ten categories according to exchange – including buying, selling, collecting, fetching, requesting, or delivering something; working; attending an event; engaging in social visits; and other. Thirty-two of the total travel episodes, or 19.2 percent, had a purpose

related to buying; 21 of the episodes, or 12.6 percent, were related to fetching something or someone; and 18 of the episodes, or 10.8 percent, involved collecting something, such as food products and rubber. There were six episodes, or 3.6 percent, where items were sold and two episodes, 1.2 percent, where something was requested or delivered.

Individuals traveled to engage in social visits during 32 episodes, or 19.2 percent, and to attend an event during 29 travel episodes, or 17.4 percent. There were eight episodes of travel, or 4.8 percent, involving work and 17 episodes of travel, or 10.2 percent, for other purposes, including getting a school photo taken and medical care.

**Table 18: Exchange category and travel distance**

Exchange category	0-5 km	6-10 km	11-15 km	16+ km	Totals / % Total
Buy	31	1	0	0	32 / 19.2%
Sell	6	0	0	0	6 / 3.6%
Collect	13	3	2	0	18 / 10.8%
Fetch	13	2	1	5	21 / 12.5%
Request	1	0	0	1	2 / 1.2%
Deliver	2	0	0	0	2 / 1.2%
Attend	17	8	0	4	29 / 17.4%
Social relations	22	7	0	3	32 / 19.2%
Work	6	2	0	0	8 / 4.7%
Other	17	0	0	0	17 / 10.2%
Totals / % Total	128 / 76.6%	23 / 13.8%	3 / 1.8%	13 / 7.8%	167 / 100%

Individuals traveled to Lanjak for 29 of the 32 episodes where the purpose was to buy something (Table 18). Buying was also the reason for traveling to Sawah twice and to Ukit-Ukit once. All travel episodes associated with selling and delivering involved Lanjak as the destination. The purposes of getting a school photo taken and medical care were also all associated with Lanjak.

Among the travel episodes involving collecting (including collecting kulan, fruit, and maize) there were five associated with Lanjak, eight episodes associated with Sawah, and five more travel episodes associated with destinations six or more kilometers from Sungai Sedik. Individuals who traveled with the purpose of fetching went to Lanjak for five episodes, to Sawah seven separate times, and to Sungai Iring once. The remaining eight episodes associated with fetching were associated with destinations six or more kilometers from the longhouse. The two travel episodes involving the request of something were to Sawah and Sungai Pelai', which are zero to five kilometers and 19 kilometers from the Sungai Sedik community, respectively. Individuals traveled for work purposes eight times – three episodes to Lanjak, three episodes to Sawah, and one episode each to destinations six to ten kilometers away including Kelawe' and Ngaung Keroh.

Travel for the purpose of attending an event was comprised of 12 episodes of travel to Lanjak, two each to Sawah and Sungai Luar, and one multiple destination episode to Sawah, Sungai Luar, and Sungai Long. There were eight episodes of travel in this category to destinations six to ten kilometers from the longhouse and four episodes of travel to Lubok Bandung, which is located 25 kilometers from Sungai Sedik. The exchange category of social visits included 11 travel episodes to Lanjak, seven to Sawah, and one to Sungai Luar. There were seven episodes involving social visits traveled to destinations six to ten kilometers away, and five episodes of travel 16 or more kilometers from the longhouse.

There were also kin relationships associated with each of the exchange categories (Table 19). Of the 32 travel episodes where something was bought, 35 percent involved

non-kin, 31 percent involved ambiguous kin, 28 percent involved close kin, and six percent involved distant kin . The episodes of travel for the purpose of selling something included three episodes, or 50 percent, with ambiguous kin; one episode, or 17 percent, with distant kin; one episode, with close kin; and one episode involving a non-kin relationship.

Individuals who traveled to collect were involved with close kin in 13 episodes, or 72 percent; with distant kin in one episode, or six percent; with ambiguous kin in two episodes, or 11 percent; and with non-kin in two episodes. Episodes associated with fetching something included 11 episodes, or 52 percent, with close kin; six episodes, or 29 percent, with ambiguous kin; three episodes, or 14 percent, with non-kin; and one episode associated, or five percent, with distant kin. Of the two travel episodes involving the request of something, one involved close kin and the other involved distant kin. There were also two episodes for the purpose of delivering: one was associated with close kin and one with ambiguous kin.

Twenty-four of the episodes, or 75 percent, involved with the exchange purpose “social visits,” were associated with close kin. Within this category, there were four episodes, or 13 percent, associated with distant kin, three episodes, or nine percent, associated with ambiguous kin; and one episode, or three percent, associated with non-kin traveling. Individuals who traveled to attend an event reported an involvement with close kin during 45 percent of the travel episodes, involvement with distant kin in 14 percent of the episodes, involvement with ambiguous kin in 34 percent of the episodes, and involvement with non-kin in the remaining seven percent of the episodes. The travel

associated with the purpose of working included five episodes, or 62.5 percent, involving close kin and three episodes, or 37.5 percent, involving non-kin.

**Table 19: Exchange categories and kin relationship**

Exchange categories	Close Kin	Distant Kin	Ambiguous Kin	Non-Kin	Totals / % Total
Buy	9	2	10	11	32 / 19.1%
Sell	1	1	3	1	6 / 3.6%
Collect	13	1	2	2	18 / 10.8%
Fetch	11	1	6	3	21 / 12.6%
Request	1	-	0	1	2 / 1.2%
Deliver	1	-	1	-	2 / 1.2%
Attend	13	4	10	2	29 / 17.4%
Social visits	24	4	3	1	32 / 19.1%
Work	5	-	0	3	8 / 4.8%
Other	8	2	5	2	17 / 10.2%
Totals / %Total	86 / 51.5%	15 / 9.0%	40 / 23.9%	26 / 15.6%	167

### Visiting

As discussed earlier, there were several different exchange categories including collecting, requesting, delivering, selling, or fetching something; engaging in social visits; attending an event; and working. There were no observed visiting episodes involving the purchase of goods. Fifty-two of the visits, or 39.1 percent, involved visiting for social reasons such as social visits, visiting ill kin, nocturnal courting, and stopping in on the way home. Visitors also traveled to Sungai Sedik six times to request something and six times to deliver something. There were 12 visits of fetching items or individuals and one visit to sell something. Fourteen of the visiting episodes, or 10.5 percent, were associated with working and 30 of the visits, or 22.6 percent, involved attending some type of event.

There were visiting episodes from locations within five kilometers of Sungai Sedik associated with all of the exchange categories stated above (Table 20). The one visiting episode with the purpose of selling something involved someone visiting from Lanjak. All of the collecting episodes were associated with Sawah, and 67 percent of the delivering episodes involved visiting from locations within five kilometers of Sungai Sedik. Eleven of the twelve episodes where something was fetched were also associated with locations in this proximity. There were also eleven episodes of visiting for work purposes and 13 visits to attend an event from locations within five kilometers of the longhouse.

**Table 20: Exchange categories and distance of origination from Sungai Sedik**

Exchange categories	0-5 km	6-10km	11-15 km	16+ km	Totals / % Totals
Sell	1	0	0	0	1 / 0.8%
Collect	3	0	0	0	3 / 2.3%
Request	1	3	0	2	6 / 4.5%
Deliver	4	0	0	2	6 / 4.5%
Fetch	11	1	0	0	12 / 9.0%
Social visits	31	13	0	8	52 / 39.0%
Work	12	1	0	1	14 / 10.5%
Attend	13	11	1	5	30 / 22.6%
Other	7	0	0	2	9 / 6.8%
Totals / % Totals	83 / 62.4%	29 / 21.8%	1 / 0.8%	20 / 15.0%	133

Visitors traveled for social reasons from locations six to ten kilometers from Sungai Sedik during 13 of the episodes. Traveling this distance to attend an event comprised about one-third, or 11 episodes, of the attending category. Also associated with this distance was one episode of visiting to fetch items, one visit to work, and three visits to fetch something. The one episode of visiting from a location 11 to 15 kilometers

from the longhouse was associated with attending an event. Visiting from locations 16 or more kilometers from Sungai Sedik included eight visits involving social visits and five visits to attend an event. This distance was also associated with two visits to request something, one visit to work, and one visit to deliver something.

There were also kin relationships associated with each of the visiting exchange categories (Table 21). Of the 52 episodes involving social relations, 37 visits, or 71.2 percent, were associated with close kin visiting; two visits, or 3.8 percent, involved distant kin; nine episodes, or 17.3 percent, were ambiguous kin visiting; and four visits, or 7.7%. Visiting Sungai Sedik to attend an event involved 11 episodes of close kin visiting, four episodes of distant kin visiting, 10 episodes of ambiguous kin visiting, and 5 episodes of non-kin visiting. Kin types associated with visiting the longhouse for work saw 11 episodes of close kin visiting, one episode of distant kin visiting, and three episodes of ambiguous kin visiting.

The one episode of visiting to sell something involved non-kin. Eleven of the 12 fetching episodes were associated with close kin, and the remaining episodes involved ambiguous kin. Five close kin relationships and one ambiguous relationship were observed when visits involved delivering resources. The three episodes involving the collection of items were distributed among the kin types, with one episode being associated each with close, distant, and ambiguous kin. There were also two episodes of close kin visiting to request something, and one non-kin and three ambiguous kin visiting for the same reason.

**Table 21: Exchange categories and kin relationship**

Exchange categories	Close Kin	Distant Kin	Ambiguous Kin	Non-Kin	Totals / % Totals
Sell	-	-	-	1	1 / 0.8%

Collect	1	1	1	-	3 / 2.3%
Request	2	-	3	1	6 / 4.5%
Deliver	5	-	1	-	6 / 4.5%
Fetch	11	-	1	-	12 / 9.0%
Social visits	37	2	9	4	52 / 39.1%
Work	11	1	2	-	14 / 10.5%
Attend	11	4	10	5	30 / 22.5%
Other	6	2	1		9 / 6.8%
Totals / % Totals	84 / 63.2%	10 / 7.5%	28 / 21.0%	11 / 8.3%	133

## Chapter Five

### Analysis

There are five variables to discuss in the analysis of the mobility patterns of the Sungai Sedik community. Distance and frequency, season, gender and age, kin relationships, and exchange all influenced the mobility of the community during the period of observation. I will discuss the most influential aspects of these concepts in this section.

#### Distance and Frequency

The distance and frequency of the travel and visiting episodes led to varied movement over the landscape of Borneo. The Iban created a complex spatial network of resources that as recorded in the data, spanned further than sixteen kilometers and included 28 destinations/origins. Sungai Sedik and all other locations included in the data can be defined as resource patches. Whether the locations were fine-grained or coarse-grained, individuals and groups traveled to these locations to procure resources. As resource patches, these varying locations may increase resilience in the face of resource disturbances. Some locations were traveled to/visited from more frequently than

others depending on their distance from Sungai Sedik and the resources available at those locations.

### Traveling

As shown in the results, travel among the Sungai Sedik community varied in distance and frequency. Of all travel episodes, individuals and groups traveled most frequently to locations within five kilometers of the longhouse. The majority of the episodes traveled within this distance were for social purposes or to obtain food products. Travel to locations 11 to 15 kilometers from the longhouse occurred least frequently, with only three episodes, all with the purpose of obtaining economic and natural resources.

Fundamentally, individuals and groups traveled from the longhouse to varying destinations, or resource patches, to obtain needed resources. After examination of the traveling data set, one can conclude that the majority of destinations visited were fine-grained resource patches, where a variety of resources were present. Individuals and groups traveled most often to fine-grained resource patches that were located within close proximity to the longhouse. Winterhalder's definition of a fine-grained resource patch, an area exploited for a wide variety of resources, is exemplified by those destinations within five kilometers of Sungai Sedik. These fine-grained patches provided a multitude of resources including purposes from all of the identified categories (i.e. social visiting; food and supplies; and political, ritual, and medical purposes). Individuals and groups were able to easily travel to these close destinations and gain access to a wide variety of needed resources.

As fine-grained resource patches, Lanjak and Sawah were exploited for a wide variety of economic resources, enabling groups and individuals to travel more frequently

to these convenient locations near the longhouse. According to Casimir's theory, these destinations can also be characterized as social resource patches. Several social purposes for traveling to Lanjak included attending a band performance and multiple cockfights. Both of these can be characterized as fine-grained social resource patches, in which groups and individuals can engage in social interactions with multiple people.

Further destinations were traveled to for more specific resources, characterizing them as coarse-grained. Destinations located 11 kilometers or more from the longhouse can be characterized as coarse-grained patches because groups and individuals visited for specific reasons including episodes to fetch items unique to the location (i.e. school photo, padi, salary) and to attend traditional rituals. It is possible that the network of lakes located 12 kilometers from Sungai Sedik was used as a coarse-grained resource patch as all episodes of travel there were to catch fish. The lakes could also be considered a fine-grained patch as there are multiple other resources available there, but the only observed travel episodes to the lakes involved catching fish. Travel to the lakes was also seasonal as, during the dry season, the water levels fall and fish congregate in shallower water, making them easier to catch. One can conclude that these destinations were traveled to less frequently because more commonly used resources were available in areas closer to the longhouse; whereas the more unique items were not available close to the longhouse.

It should be noted that fine-grained and coarse-grained social resource patches are not mutually exclusive. It is possible that a coarse-grained social patch could exist within a fine-grained resource patch and vice-versa. Travel to Lanjak could include gathering multiple economic resources while also visiting with one kin, which exemplifies a

coarse-grained social patch within a fine-grained economic patch. Travel to a coarse-grained patch for a specific ritual may also allow for a group or individuals to visit with multiple kin or non-kin at one time, illustrating a fine-grained social patch within a coarse-grained patch.

The distance and frequency trends of the Sungai Sedik community support the concept that individuals and groups travel to specific destinations for specific resources in regular patterns. The mobility patterns created during the observation period exemplify that travel is not irregular and is in fact systematic. This longhouse community consistently utilizes a system of well-known resource patches that influences the frequency and destination of travel.

### Visiting

Visitors traveling to the Sungai Sedik longhouse came from varying locations in order to utilize the longhouse as a resource patch. Visitors utilized the Sungai Sedik longhouse as both an economic and social fine-grained resource patch. Over half of the visitors during the observation period came from destinations within five kilometers of the longhouse, with Lanjak and Sawah being the primary originating locations. Visitors traveled from Lanjak and Sawah to the longhouse primarily for social and ritual purposes, as well as to gain access to economic resources.

In terms of social purpose, individuals and groups did not travel to the longhouse for one particular social reason. Visitors came for social visiting, courting, escorting kin, leaving kids with kin, and building a coffin. This trend continued into visiting for ritual purposes, including attending outside and Christian rituals, collecting heirlooms and attending a wedding. The longhouse also offered visitors natural and economic

resources, including pay for work or goods or to gather food resources. The multitude of both social and economic resources available at the longhouse appears to have made it appealing and useful to surrounding communities. Although the longhouse could be considered a coarse-grained resource to individuals and groups that visit to acquire specific resources rather than a variety of resources, overall the nature of the longhouse and its broad range of resources characterize it as fine-grained patch in accordance with Winterhalder's definition.

Sungai Sedik also provided a variety of social and economic resources for visitors traveling long distances. The majority of visitors that traveled distances further than five kilometers visited Sungai Sedik for social reasons. Other purposes for visiting the longhouse included attending political meetings, helping with work on a building, and to request magical and herbal medicines. The broad range of these resources exemplifies the fine-grained nature of the Sungai Sedik longhouse; visitors were able to gain access to a wide variety of necessary resources.

### **Gender and Age**

As shown in the results, the age and gender of the traveling and visiting individuals and groups affected the mobility patterns that were observed. The movement observed in this study was primarily what Binford identified as logistical movement, in that small groups (or individuals) traveled out from their residences on daily task-based collecting trips. The destination, frequency, and purpose of these trips were all influenced by the gender and age of the individuals and groups traveling and vice-versa. Seasonality also played a large role in the gender and age traveling and visiting mobility

patterns. The gender requirements of the Iban swidden cycle largely determined when individuals and groups could travel and visit.

### Traveling

The age and gender of the traveling individuals in the Sungai Sedik community affected their mobility patterns. The majority of travelers of all ages were female, while the majority of travelers who were aged 16 and up were male. According to Wadley's 1992-93 time allocation data there were almost twice as many women than men at the Sungai Sedik longhouse, so with respect to this ratio, women participated in almost twice as many traveling episodes as men. Women and men traveled varying distances and for different purposes. These mobility patterns coincide with the gender requirements of the labor demands and the resources needed during different periods of the swidden cycle. Women traveled more during periods of low female labor demands and men traveled more during low periods of male labor demands.

The average frequency of travel of individual females or female groups was slightly higher than the frequency of travel of individual males or male groups. One female, aged 42, traveled the most frequently of all Sungai Sedik community members. As discussed below, these gender and age frequency patterns developed in relation to the distance, seasonality, and purpose of travel.

Females aged 16 plus years traveled most frequently to distances within five kilometers of the Sungai Sedik longhouse. Males in this age group traveled less frequently within this distance and more frequently than females in this age group to distances 11 kilometers or more from the longhouse. Travel to Lanjak and Sawah was frequently associated with social purposes or visiting. These close distances facilitated

social interaction among different communities. Females, more so than males, frequently traveled to Lanjak to buy supplies, indicating that females were often delegated this task, which contributed to the high rate of short-distance female travel.

Throughout the annual swidden cycle, the travel patterns of males and females were similar, with females traveling more frequently than males. The number of travel episodes for both groups was highest during the June/July slashing and felling period—although the number of episodes in this month was still closer to monthly averages for females—and lower for both groups during the February/March harvest period. Although labor demands for males and females were high during slashing and felling, travel was necessary for many ritual purposes. During the harvest period, travel occurred less frequently as harvesting labor demands took precedence.

The purposes of the travel episodes below were a result of the swidden cycle period in which they occurred. Females were involved in travel for agricultural purposes, including one episode to help on a hill swidden during the burning and planting period and one episode to fetch newly-harvested rice during the October/November month, when labor demands were low before the harvest period began. Labor exchange among women was most common during this period of weeding and planting. Generally, individuals and groups helped other communities when extra labor was needed as well as fetched extra rice resources during periods before the harvest when these resources were low. Males were also involved in travel for agricultural purposes. One of these episodes, in which a male traveled to help build a field hut, occurred during the October/November month, the period of down time after burning and planting. Another episode occurred at

the end of the harvest period, when a male traveled to fetch a pick-up to haul in the newly-harvested rice.

Non-agricultural purposes for travel also varied in relation to gender. For example, males traveled for all of the political episodes, whereas females traveled twice as frequently as males for visiting purposes. Females traveled more frequently for medical reasons, including ten episodes for clinical medical care. Males were associated with the only hunting travel episodes and all but one of the fishing travel episodes. Females were more often associated with fetching needed resources, including *pandanus* leaves for weaving, fish, and fruit. These travel trends emphasize the equal, but gender-defined, division of labor among the Sungai Sedik community.

Females aged 16 years and older traveled most often to shorter distances and traveled frequently during male peak periods of labor (July/August during slashing and felling). Females mostly participated in logistical movements which included traveling for social reasons or traveling for needed resources. Males aged 16 years and older traveled further distances and traveled frequently during peak labor periods to gain access to immediately-required resources. Thus, mobility patterns emerged from the gender and age-specific roles within the Sungai Sedik longhouse.

### Visiting

The mobility patterns of visiting individuals and groups varied depending on their gender composition. Male individuals and groups visited slightly more frequently than female individuals and groups. Although their frequency of visiting was similar, the time of year in which they visited most often and how far they traveled was statistically different. Males visited the longhouse most frequently during the June/July month for

ritual and social reasons. Although this month marked a peak labor period of felling and burning, males were also traveling for necessary post-harvest traditional rituals and social visiting. Other male travel included a visit during the planting period to help with hill swidden work and a visit to help with work on a building during the April/May month when swidden labor demands are low. Males visited most frequently from locations within five kilometers of the longhouse, but male individuals and groups traveled more frequently than females from locations six or more kilometers from Sungai Sedik. This indicates that while it was common for males to visit from short distances, males were also likely to travel further distances to visit the longhouse.

Female individuals and groups visited the longhouse most frequently during the December/January month, which was a period of low swidden labor demands for men, but a period of high labor demands for women as they weeded the fields before the harvest began. During this month females traveled for social, ritual, and agricultural reasons, including attending a Christian ritual, visiting during a school holiday, and visiting kin. Several episodes in which females fetched *berau* (milled rice) occurred during this month as well as the August/September month, as the rice supply was likely low due to the long period between planting and harvesting. Females visited most frequently from locations within five kilometers of Sungai Sedik, with only a few episodes of visiting from locations six or more kilometers away. Similar to male visitors, it was common for females to visit from close locations. Yet it was less common for women to travel far distances to visit.

The majority of visiting episodes to the longhouse were made by mixed female and male groups. These mixed groups visited most frequently during the

December/January observation month, a low period of swidden labor and a peak period for Christian rituals. Mixed groups traveled during this time for social and ritual purposes, including visiting with kin and attending Christian rituals. Mixed groups also visited the longhouse during this month for agricultural purposes including milling rice and delivering *berau*; these visits coincided with a probable low rice supply. These groups visited most frequently from destinations within five kilometers of the longhouse, but they also traveled more frequently from locations six or more kilometers than exclusively male or female individuals and groups. The above trends demonstrate that individuals and groups were more likely to travel in mixed-gender groups for all distances. The purpose for travel (i.e. attending rituals) likely contributed to the increase of mixed groups because the individuals visiting may have preferred to travel to or to participate in these social and ritual events as a group.

### **Seasonality**

The time of year that travel/visiting took place influenced mobility patterns with regards to the swidden cycle. Much like pastoralists whose mobility patterns are influenced by environmental factors, the movement of the individuals and groups observed was influenced by stages of the swidden cycle and the labor required during these phases. Just as environmental factors can contribute to an abundance of resources (the correct mix of sun and rain leading to a generous harvest), they could also lead to an insufficient harvest, creating a disturbance in resources. A disruption to the normal state of resources would drive the formation of resiliency patterns that would allow individuals and groups to survive resource deficiencies.

### **Traveling**

During the observation period, travel episodes varied by time of year with travel being most frequent during the observation month of June/July (month two) and during the month of December/January (month five). A low amount of travel occurred during the August/September observation period (month three) and the February/March period (month six).

The annual swidden cycle begins in May, when each household selects and prepares land for cultivation; this preparation continues into the month of July. Travel during the June/July month was the most frequent of the observation year due to post harvest rituals and inter-longhouse visiting. The frequency of travel during this period was high, most likely because women were able to travel away from the longhouse, while men focused on slashing and felling the land (the peak period of labor falls between July and August with the majority of felling occurring during these months). In addition to travel for ritual and social purposes, individuals and groups traveled to buy supplies and acquire non-rice food products. Another purpose for travel during this month was to fetch a chainsaw, generally used for felling.

The swidden cycle period between the planting and harvesting of the rice crop was the second most traveled observation period, occurring in the month of December/January. During this time, labor demands were moderate as women continued to weed, guard, and treat the crop with herbicide allowing for individuals and groups to travel more frequently. The majority of the travel episodes during this period were for social reasons, likely due to the rest period from the swidden labor. Travel also included many trips to attend rituals, all related to the Christmas holiday. There were several travel episodes related to non-subsistence work activities, including females who traveled

to pick up salaries or fetch goods and money sent from *bejalai*. This indicates that there were men absent from the longhouse for wage labor purposes during this swidden down time as women were traveling to pick up the salaries. Men could be away from the longhouse for long periods as women would attend to the weeding of the swidden crop. Two episodes of travel during this month were related to chainsaws, one to fetch a chainsaw and one to fetch parts. These episodes most likely occurred in preparation for the upcoming felling season or because construction was occurring during swidden downtime. There was also one episode of travel during this month to tap rubber, when the surplus of labor allowed for the collection of this NTFP.

The least amount of travel occurred during the period of February/March. During this time, demands for labor were high as the swidden cycle is in the harvesting period. All members of the longhouse take part in this event, which includes threshing, processing and storage - women often harvest the rice and men carry the harvest to the longhouse. The majority of travel that did occur during this period was not to acquire food resources, but instead, travel was necessary for social, medical, and governmental reasons.

Another period of low travel occurred during the preceding August/September observation period, as this time corresponded to the planting phase in the swidden cycle. The stage of peak labor required the work of both men and women, which forced individuals to stay near the longhouse. Travel during this period was mainly associated with social purposes as well as collecting food supplies—fish, fruit, and *berau*, to possibly supplement a lack of self-produced rice resources. A few other travel episodes were to aid others with hill swidden labor. It is common during the planting stage to

participate in labor exchange when additional labor resources are needed to meet high demands.

### Visiting

Visitors traveled to Sungai Sedik throughout the observation period, with the majority of visits occurring during the June/July month. These visits were primarily associated with attending traditional rituals. Although this month was a time of moderate labor demands associated with the swidden cycle, visiting episodes were elevated because the ritual purposes (to attend and participate in rituals) made travel to the longhouse necessary. The December/January observation month was the second highest period of visiting, with many groups and individuals traveling to Sungai Sedik for social and ritual purposes. This time of year was an important period for visiting and rituals as it coincided with the Christian holiday season. Agricultural reasons for visiting during this month included both fetching and delivering uncooked rice and milling rice; these economic resources were needed as this month fell between the swidden cycle periods of planting and harvesting.

Visiting trends were lowest during the February/March observation month as others were likely harvesting their own swidden crop. The majority of visiting episodes this month were for agricultural purposes related to the harvest period of the swidden cycle. These episodes included visiting for helping with hill swidden work, checking on the hill swidden, harvesting rice for money, and fixing a padi miller. These swidden labor related visiting episodes are important because their agricultural purposes coincided with the labor demands of the Sungai Sedik longhouse.

### **Kin**

The social relationships that were present among the travelers and visitors created a complex network of resources that spanned a great distance and involved many people. Like the Trobriand Kula Ring, the Iban in this study created an exchange economy that included trading, sharing, giving, and borrowing based on relationships with others. Just as movement was an essential feature of the Kula Ring, movement plays a crucial role for the Sungai Sedik community in building social relationships with those outside of the longhouse. The maintenance of these relationships allowed for continuing access to these social resource patches, which in turn may create greater resilience when faced with resource disturbances,

### Traveling

The kin relationships associated with the travel episodes of the Sungai Sedik influenced the frequency, distance, and purpose of their mobility patterns. Travel episodes related to close kin were the most common. Ambiguous was the second most common type of relationship associated with travel episodes, non-kin was the third most common and distant kin was the least common. Travel associated with all four relationship types most generally occurred within five kilometers of the longhouse. Close kin and distant kin travel was generally related to social purposes while ambiguous kin and non-kin travel were more commonly related to non-social activities. These trends support the strong bilateral structure of the Iban culture, in that travel episodes among close kin tend to consolidate the kin structure by focusing more on close-knit relationships.

The frequency of travel patterns among the Sungai Sedik community varied according to the type of kinship associated with each travel episode. Close kin travel

occurred most frequently, being related to half of the total observed episodes. Most close kin travel involved a cousin relationship, which, as Wadley (1997:53) observed, reflects the wide range of cousin categories incorporated into the close cognatic network. Frequent close kin travel allows groups and individuals to maintain these strong cognatic networks. Maintaining these strong close kin networks is important for increasing resilience to resource disturbances. In the face of depleting economic resources, these strong social resources can provide opportunities for exchange that can be relied on. We can conclude from the varying frequency of the observed travel episodes that maintaining close kin relationships was a higher priority than maintaining or creating distant, ambiguous, or non-kin relationships.

The majority of close, distant, ambiguous, and non- kin travel episodes occurred within five kilometers of the longhouse. Generally, travel to destinations 11 kilometers or more was less likely to occur among all groups, as the majority of travel occurred closer to the longhouse. One exception to this trend was close kin travel associated with destinations 16 or more kilometers from the longhouse. Travel within this distance was most commonly related to close kin episodes, which implies that individuals and groups were more likely to travel far distances to maintain relationships with close kin. In these cases the costs related with traveling far distances (being away from the swidden fields for long periods of time, losing time and energy, etc.), may have been outweighed by the benefits of maintaining these close kin relationships.

The purpose of each travel episode was closely related to the participating kin relationship type. Close kin travel, which most commonly involved a cousin relationship, occurred often for social purposes, with the majority of these social episodes taking place

solely for visiting. Maintaining these close kin (cousin) relationships allowed the community to create kindred-based action groups that could be utilized to assist with group tasks. A few observed examples of this were close kin travel episodes with the purposes of building a field hut or helping with hill swidden work. Distant, ambiguous and non-kin travel patterns were very similar and were most often associated with buying supplies and acquiring other economic resources. Social travel related to these relationship types included more event-based entertainment (cockfights) with only a few episodes with the purpose of social visiting. These episodes of economic and social travel related to distant, ambiguous, and non-kin relationships may also have been important in creating resilience for future disturbances in resources. As with the Trobrianders, the individuals and groups in this study used movement as a means to maintain relationships with others who were not close kin. Continually selling, buying, requesting, fetching, delivering, and working with those outside of one's' close kin network allows for strengthening of a larger network from which to procure needed resources.

Patterns regarding the purpose of travel were influenced by the associated kin relationships, indicating that social visiting was more often linked with a close kin relationship and necessary to maintain a close kin network. Distant, ambiguous, and non-kin travel patterns were often associated with traveling out of economic necessity rather than for maintaining social networks.

### Visiting

The importance of maintaining a strong cognatic network of close kin is apparent within the observed visiting episodes. Not only did visitors travel to Sungai Sedik to

maintain social relationships, but they also used those relationships as a means to gain access to necessary economic resources. The majority of visitors had a close kin relationship with those they visited and they were generally associated with a social purpose. Close kin also visited the longhouse to gain or provide access to necessary economic resources. Among these episodes were visits to fetch food products, hunt, and request items, as well as visits to deliver food products, help with hill swidden labor, and provide medical care. These examples indicate that close kin visiting not only nurtured kinship ties, but also provided a means to economic resources, thus creating mobility patterns based on these close kin networks.

The majority of distant, ambiguous and non-kin visited from a location five kilometers or less from the longhouse. While this distance trend mirrors that of close kin, it is important to note that overall distant and ambiguous kin visiting was statistically less frequent than that of close kin. In contrast to the traveling data, the most common purposes for visiting among distant, ambiguous, and non-kin included social and ritual reasons. These social purposes were not limited only to social visiting but also included instances of distant and non-kin visiting ill kin, playing with other kids, and nocturnal courting. Ambiguous kin social episodes included visits to attend cockfights and visits for nocturnal courting. Nocturnal courting episodes were only present among ambiguous and non--kin (both acquaintance and friend relationships) and were not observed between close or distant kin. The Iban are more likely to marry inside their close kin networks, primarily second and third cousins in order to ensure a tight networks of kin, so courting among ambiguous and non-kin is more rare but would provide a wider pool from which to choose mates. While these nocturnal courting episodes are at odds with the actual

marriage patterns, it is not unusual for young males to court ambiguous or non-kin as they are looking for any available mates. The likelihood of these courting events resulting in marriage is low as it is recognized by the Iban that maintaining a close kin network is extremely important. Non-social episodes among distant and ambiguous kin included attending government meetings, being paid to harvest rice, and selling salted fish. These examples do not indicate a necessity for a close kin relationship and illustrate that kinship mobility patterns are highly influenced by the purpose for visiting.

### **Exchange**

All of the observed patterns of movement were established based on the necessity of resources. In many cases, access to needed resources involved other individuals and groups, meaning there was some type of exchange action occurring between people. The three different reciprocal actions; generalized (characterized by altruistic actions), balanced (direct exchange between parties), and negative (one party attempts to get something for nothing), are present in the data as shown through the connection between the purpose of the exchange action and the kin relationship associated with each episode. This connection can be used to help determine the type of reciprocal exchange, with one end of the spectrum showing close kin as highly associated to generalized reciprocity and on the other end, non-kin as highly associated negative reciprocity. Although all kin types can be associated to all forms of reciprocity, the data show a tendency towards the above continuum.

### **Traveling**

The distance, purpose, and kin relationships associated to the observed travel episodes affected the type of exchange that occurred. Like pastoralists whose movement

patterns are sometimes dictated by the presence of economic markets, the residents of Sungai Sedik traveled to Lanjak frequently because of the availability of goods that were available within a close distance. Travel to Lanjak, the closest market community to the longhouse, often involved both balanced and negative reciprocity with the majority of episodes associated with buying, selling, or delivering resources. Lanjak was also the destination associated with all medical care episodes and the majority of travel episodes to attend an event. The majority of traveling episodes with the exchange purpose of buying, selling, and delivering resources were associated with ambiguous and non-kin relationships indicating that the reciprocal action taking place was more likely to be balanced or negative rather than generalized. Thus, the balanced or negative reciprocal actions took place more often in Lanjak, as a market community, than in any other travel destination.

The majority of travel episodes associated with fetching and collecting involved travel to Sawah, the closest non-market community. The fetching and collecting episodes were most frequently associated with a close kin relationship (including fetching pig meat from a parent's sibling, fetching a chainsaw from an affine, and collecting fruit from a sibling's child). These fetching and collecting activities, along with their paired kin relationship, indicate that generalized or balanced reciprocity is present, rather than complete negative exchange. Thus, the type of destination, in this case market versus non-market environment, influences an individual or group's purpose of travel to and the exchange relationship present in that location.

Kin relationships are an important factor in the type of exchange that occurs in a particular travel episode. Close kin relationships were most commonly associated with

travel episodes involving social visits, emphasizing the importance of generalized reciprocity and balanced exchange in maintaining kin networks. The majority of travel to fetch or collect resources was also associated with close kin, possibly indicating that these exchange actions were generalized or balanced, rather than negative. There is no indication from these exchange activities that something was directly given in return when resources were collected or fetched. As a result of the close kin relationship, it is likely that there will be no repayment for these items, or that the repayment will come at a later date. Ambiguous and non-kin relationships were associated with the majority of buying and selling travel episodes. Because these exchange actions are highly related to these types of relationships, they indicate the presence of balanced or market exchange which can be characterized as more impersonal. Unlike the exchange episodes associated with close kin, these exchange episodes involved a direct exchange of resources. Buying and selling actions indicate that as a resource was given, a resource was directly expected in return. Negative reciprocity is a central feature of market settings and is to be expected in the market exchanges recorded in these data.

### Visiting

The distance, purpose, and kin relationship associated with a visiting episode influenced the type of exchange that occurred during that episode. These exchange and distance trends are highly related to the type of kin relationship prevalent in each visiting episode. Visiting from locations within five kilometers of Sungai Sedik occurred most frequently with the exchange purpose of social visits. Social visits were most commonly associated with a close kin relationship, so it can be assumed that a close kin relationship was also associated with visiting within a close proximity to the longhouse—close kin

were likely to live near-by. There was only one episode of selling during the observation period, in which distant kin visited from Lanjak, the closest market community. Visitors traveling from Sawah, the closest non-market community, visited most frequently for collecting. Other exchange purposes associating with visiting from location within five kilometers of the longhouse included fetching, delivering, visiting for work purposes, and attending events. Visitors traveled six or more kilometers to the longhouse most frequently to attend events, for social visits, and to fetch resources.

Close kin visitors traveled to Sungai Sedik most frequently for social exchange, attending events, fetching resources, and helping with work at the longhouse. These exchange categories are related to generalized or delayed balanced reciprocity in that they are either giving or taking a resource without either side expecting an immediate return. These close kin exchange patterns indicate a cycle of exchange founded on the expectation that if one gives now, they may or may not receive later.

Distant and ambiguous kin relationships were most frequently associated with social visits and attending events such as weddings, government meetings, and rituals. These visiting episodes differed from close kin visiting episodes in that the social distance, further exemplified by the purpose of these visits, was greater between the visitor and visited. The exchange categories present in the distant and ambiguous kin episodes were generally less personal than the close kin exchange categories in that they exhibited balanced reciprocity and market exchange characteristics. Individuals and groups visited Sungai Sedik in order to attend events such as cockfights and traditional rituals that were most likely attended by larger groups of non-related people. Other visiting episodes including selling salted fish and courting individuals were only

associated with distant and ambiguous kin, as these economic and social resource exchanges would not likely occur among close kin.

## **Chapter Six**

### **Conclusion**

The observed mobility patterns among the Sungai Sedik Iban community demonstrate that individuals and groups utilize movement as a means to satisfy economic and social needs. In some instances, resource location shapes the community's mobility patterns, while in other instances, the need for the resource, no matter the location, shapes the pattern of the individual or group's movement. These observations support previously established concepts that individuals and groups build complex spatial networks in order to maintain access to resources that they depend on to meet their physical and social needs (Casimir, 1992; Eghenter, 1999; Varien, 1999). These new concepts challenge the strict, traditional categories of sedentary versus mobile people.

The multi-dimensional concept of mobility was apparent in the observations among the Sungai Sedik longhouse. The concept of mobility in this study, defined as the capacity or ability to move over the western Borneo landscape, encompassed a broad variety of movement types, which included a multitude of distances and travel frequency, affected by variables such as age and gender, purpose of travel, seasonality, kin relationships, and exchange. These variables influenced how individuals and groups interacted with their environment and how they moved across the resulting landscape.

Using Wadley's local mobility study among the Sungai Sedik longhouse between April/May of 1993 and February/March of 1994, I examined the above variables in conjunction with where people traveled, why they traveled, how frequently they traveled,

and who they visited. The economic and social resources associated with these traveling and visiting data among the community contributed largely to the existing local mobility patterns.

The distance from Sungai Sedik to surrounding resource patches and their available resources determined how frequently they were visited. Lanjak and Sawah were visited most frequently by the Sungai Sedik community as their coarse-grained nature offered access to a variety of resources. Travel to distances further from the longhouse was less frequent and the associated purposes were more specific, characterizing these resource patches as fine-grained.

The gender and age of those who traveled from and visited the longhouse influenced the distance, purpose, and seasonality of their movement. On a whole, males and females aged 16 years and older traveled more frequently than those younger than 16 years. The travel patterns of males and females aged 16 years and older coincided with the labor demands of the swidden cycle. Typically when male and female swidden labor was required, their frequency of travel decreased. Extensive travel during periods of high labor demands generally coincided with a period of traditional and non-traditional ritual participation and social obligation. The purpose of travel was also reflective of the equally-important male and female gender roles within the community.

The time of year in which individuals and groups traveled and visited Sungai Sedik helped to determine the frequency and purpose for travel. The swidden cycle labor demands molded individual's and groups' ability to travel as well as what resources were necessary. Many instances of travel during different periods of the cycle coincided directly with the purpose of travel, for example fetching rice between planting and the

harvest or helping with hill swidden work during high labor periods. The tremendous importance of the swidden subsistence economy had an extreme impact on this community's mobility patterns.

The kinship relationships between the visitor and the visited influenced the frequency, distance, and purpose of travel. Travel associated with close kin relationships was observed most frequently within close proximity to the longhouse and most often related to social purposes. Distant, ambiguous, and non-kin movement also occurred within close proximity to the longhouse but far less frequently than close kin travel and was more frequently associated with long-distance travel. Although distant, ambiguous, and non-kin traveled most frequently for social purposes, these social reasons for travel did not necessitate a close kin relationship. The type of relationship relating to the frequency, distance, and purpose of travel may facilitate the growth of the cognatic kin network.

The type of exchange that occurred during each observed episode had a direct correlation to the kinship relationship between the visitor and those they visited. Close kin relationships were most frequently associated with exchange types that implied a generalized or balanced reciprocal relationship. In contrast, balanced reciprocity and market exchange were observed more frequently among travel episodes involving ambiguous and non-kin relationships. Thus, the social distance between individuals and groups was directly related to the type of exchange occurring within the travel and visiting episode.

The relationship between the observed variables, the available physical and social resources, and the mobility patterns of Sungai Sedik may be characterized as mutually

interactive. The availability of resources in a resource patch might shape the mobility patterns of the individual or group and the characteristics of the travel episode. Thus, the movement of this Iban community has an immediate effect on their surrounding landscape, and in turn, the landscape impacts their mobility patterns. By examining the patterns and variables observed in this study, I have emphasized the predictable, yet complex, nature of mobility patterns among the Sungai Sedik community. These findings show that the Iban are not just practicing long-distance and long-term residential migration and circular wage labor migration as was emphasized in previous research. Although these long-distance/long-term patterns of movement are important in gaining access to needed resources, the data discussed here also emphasize the importance of short-distance and short-term movement that allow the Iban to obtain needed resources from their local economic and social environments.

## Appendix A

### Traveling and Visiting Questionnaire

A. If Sei. Sedik residents travel to or visit outside the community:

*Enti' orang Sei. Sedik bejalai/nemuai ke menoa bukai:*

1. Who travels?  
*Sapa?*
2. Where to?  
*Kini?*
3. Dates of travel (leaving & return)  
*Kemaia kin (tlg)? Kemaia pulai (tgl)?*
4. Went to whose house?  
*Niki' ke rumah/langkau sapa?*
5. Relationship?  
*Kaban?*
6. What did you use to get there?  
*Nepan nama?*
7. Why did you go there?  
*Kapa' kin?*

B. If outsiders travel to or visit Sei. Sedik:

*Enti' orang bukai bejalai/nemuai ke menoa Sei. Sedik*

1. Who visited? What relationship?  
*Sapa? Kaban?*
2. From where?  
*Ari ni?*
3. Dates of arrival & departure  
*Kemaia kito' (tgl)? Kemia angkat (tgl)?*
4. Did they come to the longhouse, or to your fieldhut?  
*Niki' ke rumah? Niki' ke langkau?*
5. What did they use to get here?  
*Nepan nama?*
6. Why did they visit?  
*Kapa' kito'?*

## Appendix B

### Categories of Purpose

#### Agriculture

##### Rice Farming

fetch pick-up to haul in harvest  
help work on hill swidden  
build fieldhut  
fetch harvest  
mill rice  
check on swidden  
paid to harvest rice  
fix rice miller

##### Cash Crops

sell rubber  
sell *illipe* nuts  
tap rubber  
buy *ai' cuka'*

#### Ritual

##### Traditional

*ngabang* (attend ritual)  
*ngetas ulit* (lift mourning taboos)  
*ngambe' ngabang* (invite to ritual)  
request *pemali* (ritual compensation)  
attend traditional ritual  
fetch heirlooms  
collect heirlooms  
attend *melah pinang* wedding  
fetch live pig

##### Non-traditional

attend church/wedding  
attend Christian ritual  
deliver sweets  
attend Muslim ritual  
school holiday

#### Medical Treatment

##### Traditional

*manang* treatment  
fetch *manang* (shaman)  
request herbal medicine  
request magical medicine

##### Clinical

medical care  
provide medical care

#### Social

##### Kin

help build coffin  
visit from *bejalai* trip  
visit ill kin  
check on kin's house  
stop in on way home  
escort kin  
fetch eloped daughter  
leave kids with kin  
play with other kids  
return home from elopement

##### Leisure

visit  
visit Pulau Melayu  
attend entertainment (band)  
attend cockfight  
*ngayap/court*

fetch children for holiday

### **Political**

attend gov't meeting/gov't business

### **Non-subsistence work activities**

#### Wage Labor

pick up salary

fetch goods/money send from *bejalai*

#### Other Work

fetch worker

work on building

*gotong royong* work (cooperative)

### **Food Products**

#### NTFPs

fetch pig meat

buy salted fish

fetch fish

buy smoked fish

salt and smoke fish

collect fruit

catch fish

go hunting

buy palm wine

deliver smoked meat

sell salted fish

#### Agricultural

sell cassava roots & chicken

buy milled rice

fetch cassava tuber

collect maize

fetch milled rice

deliver milled rice

fetch pig feed

### **Non-food Products**

#### Implements

fetch chainsaw

deliver *agak* (basket)/implement

fetch shotgun

buy parts for chainsaw

fetch *langung*(pack)/*duko*'(knife)/paint

request smithing

#### Forest Products

saw lumber

collect *pandanas*

request permission to collect resinous wood

### **Other**

fetch clothes

spin weaving thread

buy supplies

fetch school supplies

school photo

unspecified

## Appendix C

### Categories of Exchange

#### Buy

*ai' cuka'*

salted fish

smoked fish

milled rice

parts for a chainsaw

supplies

#### Sell

rubber

*illipe* nuts

salted fish

cassava roots & chicken

#### Collect

tap rubber

catch fish

go hunting

maize

*pandanus*

fruit

#### Request

permission to collect resinous wood

iron smithing

herbal medicine

magical medicine

*pemali* (ritual compensation)

*ngetas ulit* (lift mourning taboos)

#### Deliver

smoked meat

milled rice

*agak*/implement

sweets

*ngambe' ngabang* (invitation to ritual)

#### Fetch

pick-up to haul in harvest

harvest

heirlooms

live pig

*manang* (shaman)

goods/money sent from *bejalai*  
worker  
pig meat  
fish  
cassava tuber  
milled rice  
pig feed  
chainsaw  
shotgun  
*langung*(pack)/*duko* '(knife)/paint  
clothes  
school supplies  
pick up salary  
collect heirlooms

### Social Relations

*ngayap*/courting  
play with other kids  
check on kin's house  
stop in on way home  
escort kin  
leave kids with kin  
return home from elopement  
*manang* (shaman) treatment  
fetch eloped daughter  
fetch children from holiday  
visit  
visit from *bejalai* trip  
visit ill kin

### Attend

church/wedding  
Christian ritual  
Muslim ritual  
*ngabang* (ritual)  
traditional ritual  
*melah pinang* wedding  
entertainment (band)  
cockfight  
government meeting/business

### Work

help work on hill swidden  
help work on building  
*gotong royong* work (cooperative)  
salt and smoke fish

saw lumber  
spin weaving thread  
build fieldhut  
help build coffin  
mill rice  
check on swidden  
fix padi miller  
provide medical care  
paid to harvest padi

Other

school photo  
medical care  
school holiday  
unspecified  
visit *Pulau Melayu*

## Appendix D

### Relationship Categories

#### Close Kin

parent's sibling  
cousin  
sibling  
father/father's brother  
affine (HZ/HB)  
child  
DH  
sibling's child  
parent  
*menantu* (child's spouse)  
*menantu/isan* (child)  
*entua* (spouse's parent)  
sibling and child

#### Distant Kin

*isan/entua anak* (child's spouse's parent)  
mother's cousin  
ZH's parent/ "M"  
WFB  
cousin's child  
sibling, cousin, affine  
HB's child

#### Ambiguous Kin

"menyade" (metaphorical sibling)  
"anak" (metaphorical child)  
"ake" (metaphorical grand F)  
"apai"/ "indai" (metaphorical parent)  
"kaban" (distant kin or friend)  
"teleba" (acquaintance)

#### Non-Kin



Figure 1. Map of Borneo (Wadley, 1997:2)

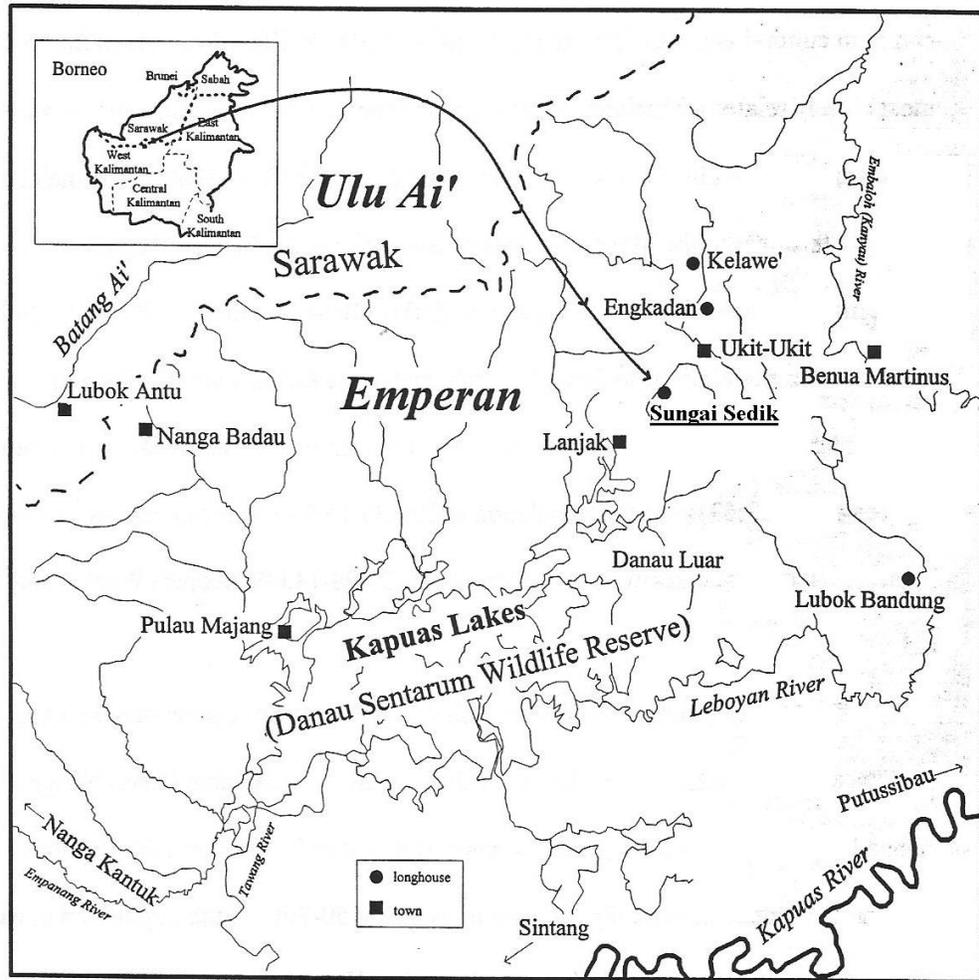


Figure 2. Map of the Sungai Sedik Region (Wadley, 1997:34)

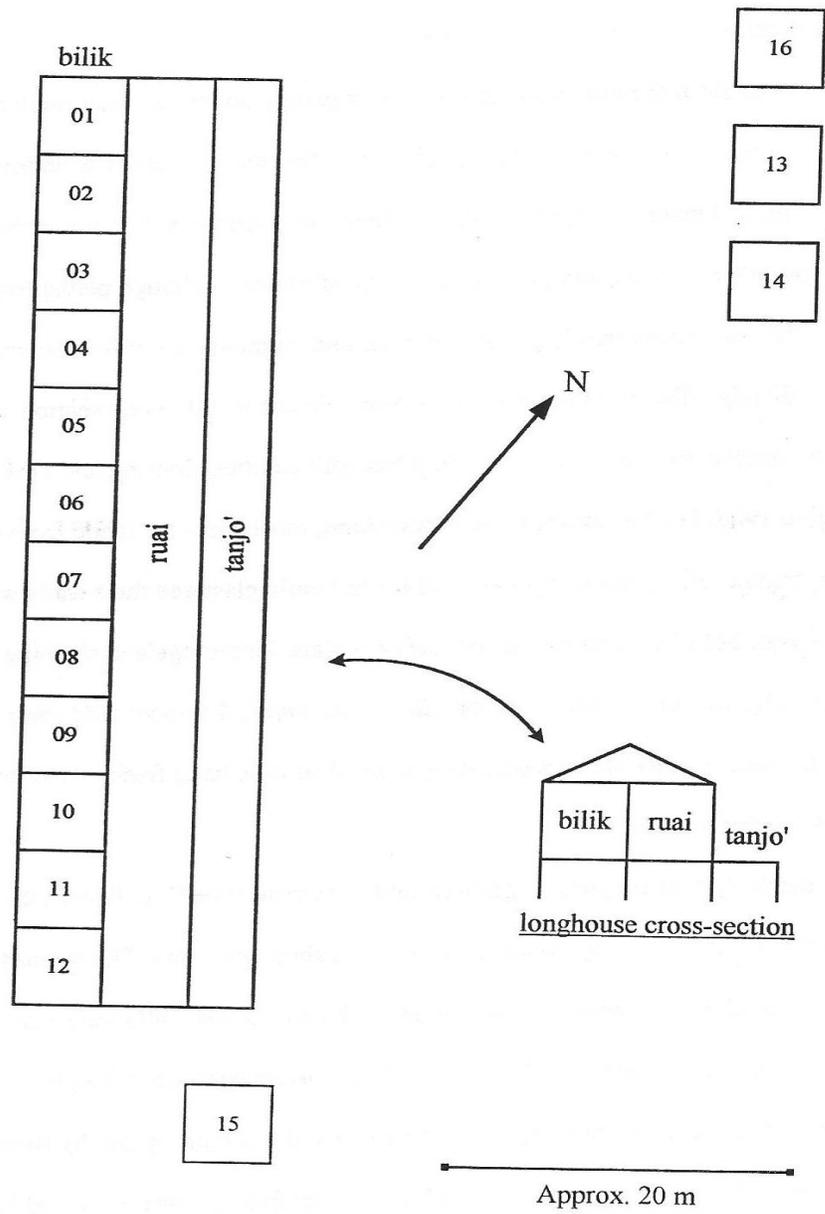


Figure 3. Sungai Sedik Longhouse Blueprint (Wadley, 1997: 55)

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