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**Food security among the Orang Rimba in Jambi:  
transformation processes among contemporary Indonesian  
hunter-gatherers**

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An Orang Rimba man in Sako Tulang checks his rubber seeds. 2014

### III The Sako Tulang Group: Living on the Margins

I had mixed feelings as I ventured into the forest once again in mid-2012. It took me quite some time, but thanks to the assistance and comprehensive information I got from WARSI, I was eventually able to reach the Orang Rimba who live in the Makekal Hilir area in the Western part of the Bukit Duabelas national park. The journey was an arduous and long one, riding pillion on a motorbike belonging to a WARSI member, who had played an important role in facilitating my introduction to the Orang Rimba. It was early July and, as usual, the weather during this time of the year was unpredictable. While I had expected to face rainy days, to my surprise I ended up contending with hot and humid weather instead. The distance I travelled from Jambi city to Tebo district was a solid 200 km along the *Jalan Lintas Sumatra* (Trans Sumatra Highway). I had to navigate another 40 km from Tebo, through a meandering stretch of roads built for a transmigration project, hence punctuated with rubber and oil palm plantations as far as the eye could see. It took me about five to six hours to reach Seijernih Village, or as it is popularly known by local inhabitants - Desa S.P.A. (the village of Satuan Pemukiman A).

I was lucky to find a transit shelter where I could rest before entering the Orang Rimba area. Just a kilometer prior to reaching the national park, there was a very nice transmigrant family, who were delighted to welcome newcomers like me, just as they had done with NGO staffs, students, researchers, photographers, journalists, social workers, film crews, and others wanting to meet the Orang Rimba in the western part of the park. The head of the household hails from Banyumas (Central Java) and has been living in Jambi for about 20 years. As a typical transmigrant, he owns a small oil palm plot, which provides a living for his family. The family's home would serve as a place for me to take a break from fieldwork activities in Sako Tulang and so I spent my time going back and forth, at least once a week, if nothing else to get a taste of Javanese cooking. My visits to the family were also a chance to take a "proper" shower, after days in the forest where river water was the only source of water for my daily basic needs. These trips also gave me the opportunity to replenish my supplies of rice, tea, coffee, sugar, biscuits, and cigarettes, the latter being a medium of exchange for my fieldwork. It was also good to have time to detach myself, for a while, from the community that was the object of my research. This chapter is dedicated to the Sako Tulang group, who live outside of the Bukit Duabelas National Park, on its western side. The first part of the chapter will provide a short description of the group in terms of their landscape and settlement, their numbers and group composition, and their modes of livelihood. The second part of the chapter will provide the results of the collected information about food, the daily intake, and the types and origin of the food consumed by this group.

### 3.1 Ethnographic background to the Sako Tulang group

The Sako Tulang group lives at approximately 10 kms from the primary forest of the national park. Most of its members lead sedentary lives in rubber fields. They derive their name from the Sako Tulang River. Historically, this river was used by people as a means of transporting rubber to the village of Tanah Garo. However, the building of logging roads has led to a decline of riverine transport. Instead, nowadays motorbikes provide the preferred means of transport of rubber to Tanah Garo, S.P.A. and other destinations.

#### Landscape and settlement

Sako Tulang itself is a rivulet that branches off from the sub-branch of the eastern part of the Makekal River. The topography is relatively flat and the land is mainly used for rubber plantations. In addition, the terrain consists of cleared lands, scant forested area, oil palm plantations, some human settlements, small branch rivers, and roads. The area used to be a vast primary forest but has now been degraded heavily, due to logging activities. In addition, according to my key informants, the Sako Tulang area has been converted into rubber plantations from the 1970s onwards, peaking in the late 1990s. It is crisscrossed by many former logging roads which have, over time, become the main links between settlements, forest fields and plantations. These roads serve as the main entrance to the Sako Tulang settlement area and to their farm fields planted with rubber trees and oil palms. The agricultural fields of the Orang Rimba are situated close to the fields that belong to other ethnic groups such as the Malay villagers and the Javanese transmigrants. According to my key informants, about more than 20 years ago, the Sako Tulang group began settling down in the current area. The first person who settled in was a Depati who continues to be the leader of the group till the present day. He left the Makekal Hilir main river area because he had lost his son. According to the Orang Rimba custom, whoever loses a family member should undertake *melangun*. The movement follows certain cultural considerations. First, it has to be close to the river because water has a very special meaning for the Orang Rimba, simply because it is a source of living. Thus, for practical reasons and purposes, the settlement of the Orang Rimba always follows riverbanks.

The settlement of the Sako Tulang group consists of four clusters of houses divided in three segments as shown in Figure 32 below. The group is dispersed on the basis of family relationships and the fields they have cleared and that they cultivate. Almost all houses in this settlement are of the *rumah ditano* type.

Figure 33 shows the segments of the settlement. The first and second segments together cover about 10 ha of land and comprise most houses. This area also contains most rubber and oil palm fields, which belong to the Orang Rimba. The first segment warrants extra attention because the area serves as the entrance gate to the Sako Tulang group from the S.P.A. village. Four households live in this first segment. The source of livelihood for these four households varies. The Orang Rimba's sources of livelihood in this area have shifted recently. Two families rely on palm oil as their main source of livelihood, one family manages rubber fields, and one family offers their services to others by tapping rubber in



Figure 31. The landscape of the secondary forest in Sako Tulang area

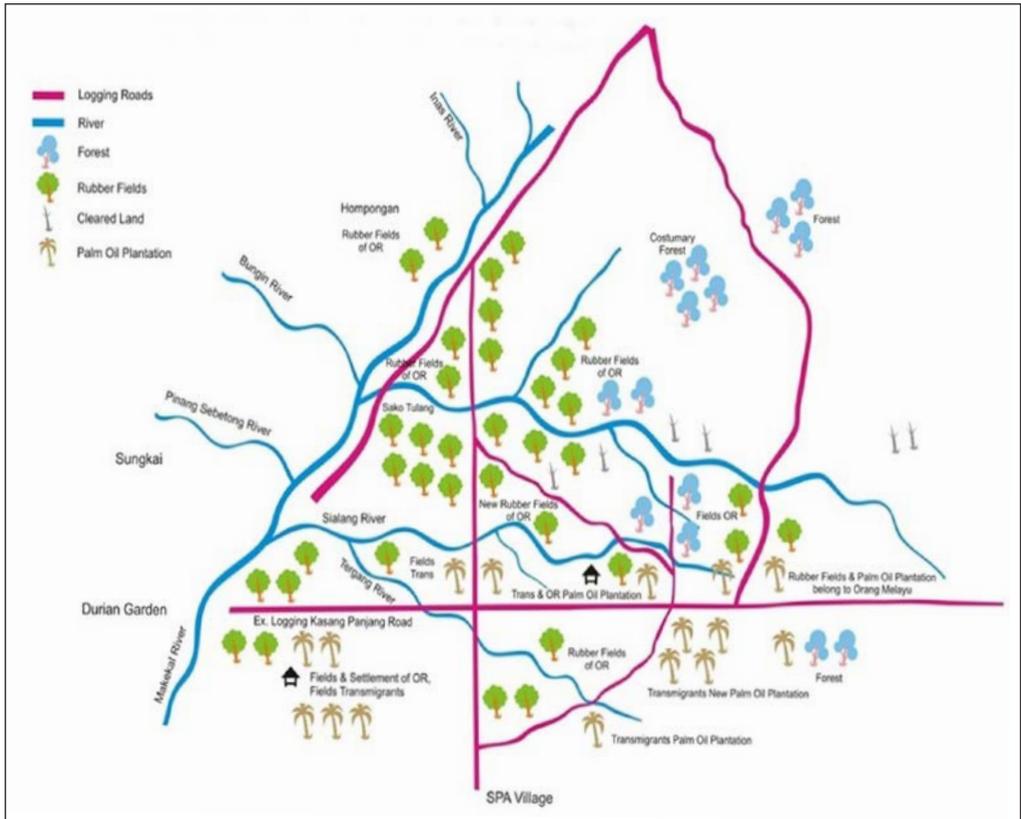


Figure 32. Schematic sketch of the area of the Sako Tulang group

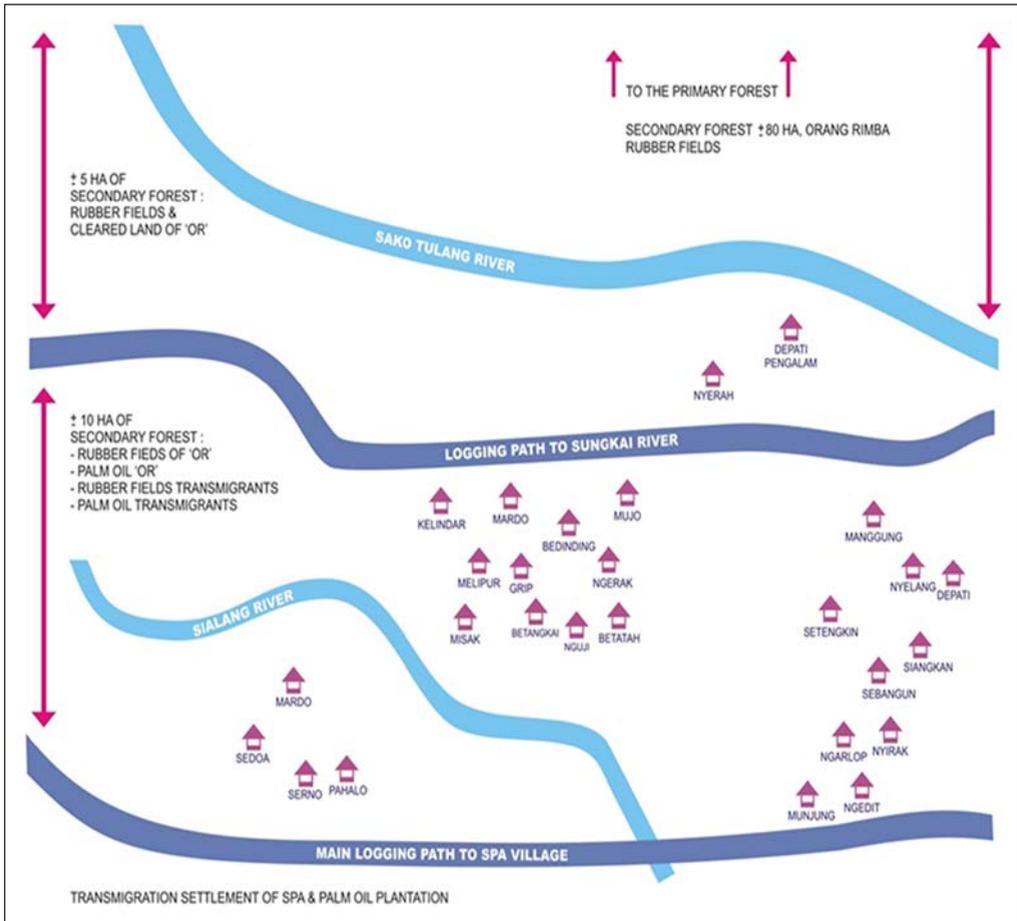


Figure 33. Detailed layout sketch of Sako Tulang settlements

their plantations. I surmise that the above conditions arose due to the geography of this area, which borders the transmigrant settlement. This proximity to transmigrant settlers influences the Orang Rimba’s adoption of “modern” livelihoods that are akin to their neighbors.

The second segment of the settlement consists of two subgroups. The first subgroup is located at the center and consists of 11 households. The other is in the eastern part and has ten households. All of the households in the two groups have rubber fields and some of them own oil palm plantations varying from 1.5 ha to 10 ha. While most of the Sako Tulang households’ rubber and oil palm plantations are located close to the settlement, some are also found further away, near the boundary of the primary forest. That said, it is evident that the oil palm plantations are located near the settlement as well as in close proximity of plantations belonging to the transmigrants.

The last segment, which is very close to the main Sako Tulang River, consists of only two households. One of them is a special case, because the head of the household

owns two houses, one in this area (the main house) and one in the second segment of the settlement (the additional house). This is because he owns larger fields than other members in this group. As a result, he must commute daily, back and forth between the main house (near the Sako Tulang River) and his rubber fields located in the second segment. Although it consists of only two households, the third segment is the busiest area in the group. Almost all members of this group rely heavily on the Sako Tulang River to meet their daily needs, in terms of water for drinking, washing, and bathing, as well as cleaning and storing the rubber. Living within close reach of Satuan Pemukiman A or S.P.A., one of the transmigration sites, the members of the Sako Tulang group regularly visit this village by motorbike to buy basic needs such as rice, salt, sugar, tea, coffee, snacks, and cigarettes from the local stores. In addition, the Saturday market is occasionally visited to purchase food items in bigger quantities, but also cloths (*kain*). While men and the youngsters mostly shop at the stores, women more often visit the Saturday market. The market serves as a melting pot and meeting point for Orang Rimba from across different groups. It is also a place for young Orang Rimba to meet one's future spouse.

#### **The composition of the group**

The Orang Rimba of Makekal Hilir (downstream Makekal) and the Makekal Tengah (midstream Makekal) used to be one big group. Now they live in two main groups, namely Makekal Hilir and Makekal Hulu with two different *tumenggung*. Factors including internal friction<sup>32</sup> and a decline in natural resources led to their splitting up into smaller groups that, today, live along smaller river branches.

Presently, the Orang Rimba of the Makekal Hilir form four smaller groups that occupy four watercourses or sub-branches of the Makekal River, namely the Sako Nini Tuo, the Bernai, the Sako Tulang, and the Sungkai (see also Table 8 below). Of these, the Bernai, the Sako Nini Tuo, and half of the Sungkai group stay within the boundaries of the TNBD, while the Sako Tulang and the other part of the Sungkai group settle outside the park. The findings based on 2010 WARSI-BPS survey on the Orang Rimba population, followed by my own survey in 2013-2014, are reflected in the Table 8 below on a more detailed account of the demographics in Makekal Hilir area.

As Table 8 shows, in 2013-2014 the Sako Tulang group had slightly more men than women. According to the Orang Rimba custom, after getting married, a man follows his wife and stays in a house that is close to the parents of the wife. Marriage across the Orang Rimba groups is common, and usually the husband follows his wife and becomes a new member of her group. It is common for the Sako Tulang group to have cross-group marriages with the men originally coming from different groups in Makekal Hilir and the groups outside of Makekal Hilir areas, such as Makekal Hulu, Terab, Air Hitam, and the other groups.

<sup>32</sup> For instance, in 2012 a former *tumenggung* living along the Bernai riverbank had to cede his political powers to another *tumenggung* because he had sold land inside the national park to a Melayu landlord and used the money for his own ends. In response to his malpractices, the group decided to take action and they forced him to relinquish his position.

No	Group	River/Water-course/Sub branch	Population	Men	Women	Households
1	Wakil Tuha	Sako Nini Tuo	65	30	35	13
2	Bepiun	Bernai	97	53	44	23
3	Depati Pengalam	Sako Tulang	124	67	57	26
4	Depati Laman Senjo	Sungkai	49	23	26	11
<b>Total</b>			<b>335</b>	<b>173</b>	<b>162</b>	<b>73</b>

Note: No. 1, 2 and 4 are based on the 2010 population survey from WARSI in cooperation with BPS, and No. 3 (Group of Depati Pengalam) is based on the author's own survey during fieldwork in 2013-2014.

Men and women have distinct roles in providing for the household's daily needs. The Orang Rimba custom (*adat*) prescribes that men (*jenton*) are responsible for providing food for households through hunting, fishing, farming, and selling their labor. Most of the men in the Sako Tulang group rely on rubber cultivation and rubber tapping as their main source of cash income. A few have also taken on the role of middlemen. Typically, men will go out in the early morning mainly to work on their rubber fields (opening land and tapping) and come back home in the evening. Occasionally, small groups of men also go out hunting for several days. Many men also take care of the children when the women are fully occupied with other activities.

Women (*betina*) typically are in charge of the domestic errands, like cooking, washing, taking care of the children, collecting firewood, and fetching water from the river. In terms of food provisioning, women have an important role because they are charged with the task of cultivating cassava (*ubi kayu*), different varieties of yam (*gadung/benor*), taro (*keladi*), banana (*pisang*), and sweet potato (*piloh*). Women are also responsible for distributing meat from hunting activities between different group members. In some cases, women also contribute to earning money by tapping rubber (see Figure 35).

Children above roughly seven years old start to learn to hunt small animals such as frogs, river snails, river shrimp, birds, and the like. They learn to hunt from the older brothers or among the children using catapults and other simple tools. They sometimes also use only their hands to catch aquatic animals. Children can explore all of the segment areas in the Sako Tulang for hunting small animals and other explorative activities, but they are prohibited to go outside the area of the group unless they have adult companions. None of the children in the Sako Tulang group go to a formal school, but there are WARSI staff members that occasionally visit them for basic teaching (such as basic reading and calculating). WARSI also has produced some cadres from the Sako Tulang group to do the teaching to the children. This is usually done in the evening after dinner. Most of children in this group are eager to learn because there is a realization among the Sako Tulang members that education is important; at least for them to have the ability to read and calculate at the basic level in order to understand the numbers and letters in trade transactions. Since children do not go to the formal school, they have flexibility to do children's activities, which is mostly playing. But they do sometimes help their parents with domestic



Figure 34. An Orang Rimba man is taking care of his son in Sako Tulang group, 2013



Figure 35. An Orang Rimba woman of the Sako Tulang group tapping rubber in her field while taking care of her child, 2013



Figure 36. Children of Sako Tulang group eating snacks, 2013



**Figure 37.** An Orang Rimba bachelor is taking a rest while helping his parents to open the land for a rubber plantation, Sako Tulang, 2013

tasks. For instance, fetching water from the river and collecting fuel wood are tasks that are done mostly by the girls, while the boys mostly learn about hunting and practice skills like tree climbing. The results of hunting small animals are then sometimes consumed as snacks outside meals, and provide a source of animal protein. However, ready-to-eat snacks from the market are also consumed by children from the Sako Tulang group.

Since rubber has become important for the Sako Tulang group, children and teenagers of ten years old and above, regardless of their gender, also learn to manage rubber fields. The boys will learn how to open the land, while both boys and girls also learn to tap rubber.

#### **Modes of Livelihood**

Like other groups of Orang Rimba, the Sako Tulang group used to be hunter-gatherers who depended heavily on forest products for their living. The land that this group

uses lies in the logged-over and secondary forest, which they believe to be their ancestral territory, hence they are entitled to cultivate and use it. However, forest degradation and frequent interaction with other ethnic groups has led them to adjust their livelihood strategies. The neighboring the Malay people and the transmigrants practice shifting cultivation and they are heavily dependent on rubber plantations. The Orang Rimba of Sako Tulang have increasingly taken over this mode of livelihood to the extent that rubber is now their main agricultural product. Based on interviews with key informants, the rubber fields in this location were established between two and three generations ago. In addition, over the past ten years or so, the Sako Tulang households have also begun to establish small oil palm plantations<sup>33</sup>.

This economic transition has had a significant impact on the group's lifestyle, including the houses they build (from *sesudungon* to *rumah ditano*) and the extent of mobility. For instance, in the traditional setting, *melangun* activities used to take between four and six years. The vast forest area meant that longer *melangun* periods were possible, during which they would fully rely on forest resources. People from the Makekal Hilir River would go as far as the Kejasung River, an area at the center of the Bukit Duabelas national park. However, as their forest area has been reduced, now the Sako Tulang group can only take, and they prefer to do so, a few weeks or a maximum of five to six months for the *melangun* ritual.

Importantly, as will be shown in detail in section 3.2, this new way of life has had consequences with respect to food. In the past, the main staple food for the Orang Rimba in Sako Tulang consisted of a variety of wild tubers like *gadung*, *benor*, *hubi kayu*, *hubi rambat*, and *keladi*, which were collected from the forest. Today, as a result of the interaction with other ethnic groups, traditional staple foods are being replaced by rice and cultivated tubers.

That said, as I will demonstrate below, hunting and fishing remain the main sources of animal protein, an indication that no significant adjustment has been made in this regard. Game includes deer, wild pigs, tapirs, and small antelopes. Interestingly, the game animals that the Orang Rimba hunt are purely for their own consumption.

Besides hunting, the Orang Rimba in Sako Tulang also engage in fishing activities. Most of the fish are caught using nets and the Makekal River is the main fishing site. Nets are used as the main tool for fishing because it is the most practical way for the Sako Tulang group to catch the fish, and it is easy to get the fishing equipment from the local market. Unlike other aquatic fauna such as large river frogs, snails, and river shrimps that usually are consumed by children and teenagers as snacks, the various fish are consumed as the main side dish for everyone in the household. After they get the catches from the rivers, they consume them immediately once they are home. They boil the catches as simply as possible using only water and a little salt; sometimes they omit the salt depending on their

<sup>33</sup> Even though oil palm plantation is gradually adopted by the Sako Tulang group, for them rubber plantation is still the most important source of livelihood. In this regard, I do not discuss the oil palm in detail but focus more on the rubber.



Figure 38. An Orang Rimba man prepares sticks to fix the fishing net in Makekal River, 2013



Figure 39. Rubber tree in Sako Tulang, 2014



Figure 40. Rubber storage

day's catch. For example, river shrimps are consumed after being boiled briefly without any salt because they are already tasty and delicious. The same goes for snails, except that these are cooked a little longer and with a mild amount of salt. Frogs are sometimes grilled by children in the kitchen fire; if they are on the way back home and already hungry, they will make a fire outdoor to cook the frogs.

### Rubber as new livelihood

Rubber trees produce latex that is harvested by slicing the bark using a special hooked knife. With the knife (*pisau sadap karet*) a small strip of bark is cut from the trunk in a spiral flow running down the tree trunk to extract the latex. The latex runs down to a cup that is usually made of a coconut shell. The rubber latex is tapped from early morning until late morning. It is usually picked up in the late afternoon around 03.00 – 04.00 PM. The latex then has to be picked up and gathered in a small storage place on the ground. Rubber tapping is an activity that both men and women can perform.

As Table 7 shows, most households in the Sako Tulang group grow rubber and oil palm for sale, which earns them more than selling forest products or serving as menial laborers in the fields of others. This means that land becomes crucial for the Orang Rimba to maintain their livelihood. Even though they live in groups, land is managed per household. Nowadays each family in Sako Tulang considers it important to have their “own” land for rubber and oil palm fields.

**Table 8. Presence of rubber and oil palm within the three segments of the Sako Tulang group**

Segment of settlement	Number of households	Source of livelihood		
		Rubber	Oil Palm	Others
First segment: the entrance gate of the Sako Tulang, border with SPA Village.	4	✓	✓	Rubber tapping services and oil palm plantation
Second segment: the center of settlement area and most densely populated.	22	✓	✓	Local middlemen, rubber tapping services and oil palm plantation
Third segment: consists of the smallest population, yet the busiest area, close to the river.	2	✓	✓	Local middlemen, rubber tapping services and oil palm plantation

The Orang Rimba create rubber fields by slashing and burning parts of the forest. Rubber growing is done both inside and outside the primary forests, while oil palm growing is done only outside the primary forests. Together with my field assistant from Sako Tulang, I estimated the size of the rubber and oil palm fields per household, the results of which are shown in Table 8.

<b>Table 9. Estimated size (ha) of rubber and oil palm plantations in Sako Tulang group in random order, 2013</b>			
<b>Household</b>	<b>Rubber (ha)</b>	<b>Oil Palm (ha)</b>	<b>Total Ha (rubber and oil palm)</b>
HH1	20	0	20
HH2	15	4	19
HH3	5	0	5
HH4	15	0	15
HH5	4	0	4
HH6	5	3	8
HH7	3	0	3
HH8	7	0	7
HH9	10	0	10
HH10	8	0	8
HH11	6	0	6
HH12	3	0	3
HH13	10	0	10
HH14	5	0	5
HH15	15	0	15
HH16	0	2	2
HH17	0	0	0
HH18	10	2	12
HH19	0	0	0
HH20	0	3	3
HH21	5	0	5
HH22	0	3	3
HH23	0	1.5	1.5
HH24	0	0	0
HH25	27	10	37
HH26	3	0	3
<b>Total</b>	<b>176</b>	<b>28.5</b>	<b>204.5</b>
<b>Average</b>	<b>6.8</b>	<b>1.1</b>	<b>20</b>

Table 8 shows that roughly 86% (176 ha out of 204 ha) is under rubber plantation and that 20 out of 26 households (77%) own rubber fields. Roughly 14% of the area (28.5 ha out of 204 ha) is under oil palm plantation, and these are owned by 8 out of the 26 (31%) households. Moreover, 15.4% of households own both rubber and oil palm fields, while 11.5% of households own neither of the two. These three households have neither rubber nor oil palm fields because they are young couples that married recently and have not yet inherited land from their parents. It is considered the obligation of parents in the family to establish fields for their children, so that when their children grow up and form families, the fields that sustain them are ready to manage.

What is further visible from this overview is that the total area planted with rubber considerably varies between households, ranging from 3 to as much as 27 ha per

household (with an average of 6.8 ha/household). This is much less the case for the number of hectares under oil palm, which ranges from 1.5 to 10 ha per household, and averaging 1.1 ha/household.

Moreover, for both rubber and oil palm, it is one household in particular (HH 25) that owns much more than most other households. HH 25 happens to be the most important middleman inside the group, with the biggest assets. The head of HH 25 is the first middleman coming from the Orang Rimba. He started his business by buying the rubber from the Orang Rimba group in Sako Tulang and then he sold it to the bigger middlemen in Tanah Garo. From there, he collected his capital to buy his own land. He managed to establish his position as one of the monopolists in the rubber business among them. Whenever he got the benefits from the business, he bought several hectares of land and he turned it into his own plantations while he still maintains his role as a major middleman within the group. Since most households have rubber fields that are quite large, often family labor is not sufficient for all the tasks that need to be performed. Thus, in those cases fields are managed using the family's own labor resources as well as by hiring the services of others to till and tap the rubber. A 1:2 production sharing arrangement is often used, whereby 33% goes to the owner of the rubber trees and 67% goes to the individual who does the tapping.

Labor is provided from within the Sako Tulang group, other groups of Orang Rimba, and other ethnic groups. In the event that fellow Orang Rimba labor is hired, preference is often given to those who are underprivileged, i.e. those without their own fields or those in vulnerable positions such as widows or orphans. Meanwhile, labor hired from other ethnic groups usually comes from the Orang Melayu or Javanese, especially migrants from the Pati region (Central Java), who have a reputation for being hard-working. Choosing the Orang Melayu is based on the consideration that this ethnic group has had close relations with the Sako Tulang group for a long time, which makes negotiations easier. This sharing of labor underscores the relatively intensive interaction between the Sako Tulang group and other ethnic groups, particularly the Orang Melayu and transmigrants.

There is also another aspect to this relationship however, which has implications for forest management. It is commonly acknowledged that once farmers from outside work on fields owned by Orang Rimba, this provides them access to the forest more generally, which then easily leads to exploitation of the forest surrounding these fields. This is likely to increase the pressures on the primary forest in the national park and intensify forest exploration and degradation.

This intensive interaction between the Sako Tulang group and other ethnic groups, particularly the Malay people and transmigrants, can lead to further complications in their livelihoods. The first complication is in terms of household economy. Their income has increased significantly as a result of selling rubber, which means that they can buy rice, sugar, and other daily requirements, with additional food coming from hunting. The group relates to middlemen who are responsible for collecting cultivation outcomes not only to obtain substantial quantities of additional food, but also for sedentary needs, as mentioned before.

A second complication is ecological in nature. The process of hiring laborers from their fellow Orang Rimba serves to even up income distribution among the Orang Rimba

groups. For those who are in a disadvantaged position, being hired offers them an opportunity to earn additional income to supplement what they get from selling their services to cultivate the rubber fields. If the frequency of such employment increases, it would reduce logging activities in the forest. By contrast, hiring people from other ethnic groups offers plantation owners an opportunity to exploit the forests and even go beyond those fields cultivated by the Orang Rimba. This is likely to increase the pressures on the primary forest in the national park and aggravate forest exploration and degradation. Gaining access to the forest gives outsiders the chance to come and go freely and identify potential trees for harvesting for commercial purposes.

In selling their rubber, the Sako Tulang people still partly rely on external middlemen, who are mostly of Malay and Javanese origin, and are located in Tanah Garo and the transmigration village S.P.A respectively. While the Malay middlemen remain the main buyers of Sako Tulang rubber, the Javanese middlemen are of interest as they usually also own small grocery stores from which the Orang Rimba can take some goods as down-payment of their yields.

However, the increase in rubber production by the Sako Tulang group and their increased experience with selling rubber has led to a rise in the number of internal middlemen. The most important middleman within the group has total assets of roughly Rp.300,000,000<sup>34</sup> (based on my observations and calculations). He receives rubber from his fellow group members, which he then sells to larger buyers in major cities throughout Jambi.

This middleman follows a business scheme that is similar to the previous *waris* and other middlemen from other ethnic groups. He makes a down payment (new cash) of a fixed amount to people who are willing to sell their harvest to him. In good times, he has enough rubber to take a truckload to the city of Bangko (or in the nearest town of Tanah Garo) twice a week. He takes into consideration fluctuations in prices and, if necessary, he will delay selling until he gets the best price for his produce.

There are also some old men from the group who still believe in the traditional role of the *waris* (see Chapter II). Their emotional attachment to the *waris* of Tanah Garo means that, to this day, this group remains loyal to him. They send rubber to Tanah Garo through the *waris*, even though the price they get for the rubber is sometimes lower than that offered by other middlemen. There are also members of the group who take a more neutral position and divide their rubber, selling half to Tanah Garo and the other half to the middlemen, thus getting a good price as well as maintaining their relationship with the *waris*.

With the increasing importance of rubber (and to a lesser extent palm oil) as a source of cash income, new symbols of wealth have emerged and become entrenched in society. This is attested to not only by the increased importance of land ownership, but also by many Sako Tulang group members' interest in a range of modern products, particularly motorbikes and cellphones. Households with more possessions are considered wealthy households.

The environment around the houses in Sako Tulang is typical for Orang Rimba. The *rumah*

<sup>34</sup> 1 USD was equal to 13,300 IDR at the time of writing. This means that this middleman had capital assets of approximately \$US 22,530 at the time I conducted my fieldwork.

*ditano* is constructed above the ground. Under the house, there is some storage space that is used for fuel wood, daily cloths and other household equipment. Motorbikes are placed near the house. One characteristic of the houses in Sako Tulang is that a lot of rubbish is visible around the houses, most of which consists of plastics from small bags, and package material from snacks and cigarettes. One or more *kecepek* (the local shotgun) are usually located inside the house, hanging on the bamboo/wooden poles. There is no decoration in the Orang Rimba houses.

I did a survey on the assets owned by the households in the Sako Tulang group together with my field assistant. We have identified and made lists of assets in the Sako Tulang households. From Table 9 below it can be seen that most households have material possessions like motorbikes and mobile phones. Indeed, 26.9% of households own at least one phone, while 34.6% of households own several. Motorbikes are owned by 69.2% of the Sako Tulang households, with 30.8% having more than one. However, a considerable part of the households (30.8%) does not own any of these modern status symbols.

**Table 10. Estimated material assets within the group per household, 2014**

No.	Household	Motorbike	Hand phone	Cloths
1	HH1	0	0	150
2	HH2	0	0	400
3	HH3	0	0	300
4	HH4	2	3	240
5	HH5	3	1	154
6	HH6	1	0	150
7	HH7	0	0	75
8	HH8	0	0	90
9	HH9	2	1	240
10	HH10	2	1	190
11	HH11	2	2	125
12	HH12	1	2	200
13	HH13	1	1	220
14	HH14	1	1	190
15	HH15	1	2	130
16	HH16	1	1	310
17	HH17	2	1	260
18	HH18	1	0	320
19	HH19	1	2	85
20	HH20	2	2	170
21	HH21	0	0	135
22	HH22	1	2	125
23	HH23	1	2	180
24	HH24	0	0	60
25	HH25	2	3	350
26	HH26	0	0	45

In contrast, the traditional status symbol of cloths (*kain*) is found in all Sako Tulang households, although their numbers vary considerably. On average the households own 188 cloths, with a range from 45 to 400. Interestingly, there seems to be no relationship between the ownership of cloths and modern status symbols: the two households that own the least and the most cloths own neither a phone nor a motorbike.

### **Relations with the government**

Although the Sako Tulang group have abandoned their nomadic life in the forest and settled down, the group is still not recognized and incorporated into the Indonesian government administrative structure. Strangely, despite the BPS-WARSI survey mentioned earlier (BPS and KKI WARSI, 2010), done during my fieldwork period, not a single person in Sako Tulang has a citizenship identity card. This implies that, unlike their fellow countrymen, they don't have any rights or obligations, nor do they have access to public services like basic education, health care, and poverty alleviation programs like the basic living allowance<sup>35</sup>.

Nonetheless, the Sako Tulang group have been beneficiaries of various development programs initiated and implemented by the regional and central government. For instance, the Ministry of Social Affairs established the Sako Tulang Group development program, which is aimed at strengthening the capacity of the group in rubber management. Through the program, the Ministry allocated 10,000 rubber seedlings to the group in 2013. Unfortunately, as my fieldwork ended, the seedling distribution had not gone beyond the Tanah Garo village head's office, who also happens to be Orang Rimba's *waris*.

Another contradictory agenda is the plan to construct a road from the village of S.P.A. to Sako Tulang. While the district government presents this as an endeavor to energize the Orang Rimba by providing easy access to public services such as health, education and markets, the plan can also be regarded as creating a golden opportunity for the Orang Melayu and transmigrants to access the remaining forest in the western part of Bukit Duabelas. There is little doubt that if and when the construction of such a road is completed, commercial activities will increase, which will eventually lead to the reduction of the area that Orang Rimba use for hunting and gathering. The plan so far remains on the table as it is being discussed by the Ministry of Social Affairs, the Bukit Duabelas National Park authorities, and the village administration. It is worth noting that the Orang Rimba are not being consulted and hence do not play a role in the process.

## **3.2 Food production and consumption**

The second part of this chapter presents the results on daily food intake of the Sako Tulang group and additional information acquired through interviews and observation. The collection of data on daily food intake began on 16 July 2013 and ended on 15

<sup>35</sup> During my fieldwork, the government of Indonesia had a basic allowance program for the poor that gives Rp 150,000 or US\$ 12.5 per month to underprivileged families.

December 2013. Dietary records were kept for two households for a total of six months. With, on average, 30 days of data being recorded per month, 1,080 potential meals (540 per household) were recorded in 180 days for the two households. The aim of the data collection and analysis was to identify the kinds of food the group consumed and how the food was obtained. My assumption about the Sako Tulang group was that their food intake was mostly dependent on market products since they were in the process of shifting from food gathering to farming and to cultivating non-food crops in particular. I assumed them to be in need of cash income in order to buy food and other products.

In the analysis of the food intake data, I distinguish between the *types* of food and the *sources* of food. Food types were then broken down into sub-categories of carbohydrates, animal protein, fruits, and vegetables. Meanwhile, sources of food were divided into sub-categories of own production (fishing, hunting, gathering and cultivation), buying, and food that has been received from others through sharing.

I chose two key informants from the Sako Tulang group for collecting data on daily food intake at the household level. The first of these was my field assistant, who is the youngest son-in-law of a local leader in the Sako Tulang group, from whom he inherited ten hectares of rubber fields (of which only three hectares are ready for tapping). He also dabbles as a middleman, which is not an easy task as he has to compete with another, more prominent, middleman in the group. The second informant owns five hectares of rubber plantation; however, these were not yet fully productive. Thus, he was only selling limited quantities of rubber, and in addition he earned income from renting his land to other ethnic groups on a yearly basis, providing menial rubber tapping labor, and hunting.

#### Overall food intake and meal composition

Based on the observation that Orang Rimba strive to have three meals a day, the total number of *potential* meals consumed by each of the two households over a six-month period was 540 (see Table 10 below). Looking at the *actual* meals consumed, it is clear that the two households rarely skip meals: on average they consumed about 97% of all potential meals and there is hardly a difference between the two households in this respect. Table 10 further shows that of all meals, breakfast was eaten most consistently (it was never skipped), followed by dinner and lunch.

**Table 11. Types and numbers of (potential and actual) meals consumed per household, Sako Tulang**

Potential meals consumed	Actual meals consumed				
	Frequency			Percentage	
	HH 1	HH 2	Total	HH 1	HH 2
Breakfast (n = 180 for HH1 and HH2)	180	180	360	100.0	100.0
Lunch (n = 180 for HH1 and HH2)	168	173	341	93.3	96.1
Dinner (n = 180 for HH1 and HH2)	174	175	349	96.7	97.2
<b>Total (n = 540 for HH1 and HH2)</b>	<b>522</b>	<b>528</b>	<b>1,050</b>	<b>96.7</b>	<b>97.8</b>

Based on my observations, breakfast is the most important meal for the group as it provides the much-needed energy for laboring in the rubber or oil palm plantations. Men usually start their day very early and have their breakfast at 06.00 – 07.00 am. As soon as they finish their breakfast, they head to the fields to undertake crop weeding and other activities. Some of them are involved in tapping rubber on their plots, while others are middlemen or serve as laborers to other families. The activities in the field go on until late afternoon. If the wives had enough time to prepare lunch for their husbands in the early morning, a packed lunch is taken to the field. However, as the wives are also busy taking care of their children, this is not always the case. In that situation, the husbands do not eat lunch. My Sako Tulang informants preferred not to buy food elsewhere. This is not because they do not want to spend money, but because they only want to eat food that is prepared by their wives.

Table 11 provides insight in the relative presence of different food groups in all meals that were actually consumed by the two households (n = 1,050). It shows us that carbohydrates were present in almost all meals, while animal protein was part of roughly three-quarters of all meals. In contrast, fruits were never consumed as part of the main meals and vegetables very rarely were a meal component. Moreover, again, the results for both households are similar.

Type of food	Frequency		Total	Percentage		Average
	HH 1 (n = 522)	HH 2 (n = 528)		HH 1	HH 2	
Carbohydrate	501	511	1,012	96.0	96.8	96.4
Animal protein	383	398	781	73.4	75.4	74.4
Vegetable	9	9	18	1.7	1.7	1.7

A breakdown of these results for breakfast, lunch, and dinner again does not reveal major differences between the two households (see Tables 37 – 39 in Appendix 1). From the breakdown, it can be said that the relative importance of the different food groups is similar for the different meals.

Moreover, from Table 10, we learn that meals are rarely skipped and that on most days, meals are eaten three times a day. For most Orang Rimba eating means filling an empty stomach and satisfying their hunger. A full plate is usually followed by coffee or tea with sugar. A commonly heard expression after eating is “*kenyang ake*”, which literary means “I am full”. Most men follow eating time with cigarette time, while chatting with the family members.

The Orang Rimba rarely use spices in foods they cook. When meat is at hand, it is usually cooked together with cassava (if available) in the same saucepan as meat. The process of cooking meat is simple. Food processing is done by boiling, steaming, and smoking.

#### **Composition and origin of carbohydrates**

In the next two sections, I will turn to a more detailed discussion of the composition and origin of the two main food groups present in the meal record for Sako Tulang:

carbohydrates and animal protein. Taking a closer look at the subset of meals that contained carbohydrates (n=1,012), we see that rice is by far the most important, accounting for almost 58% of all carbohydrate intake in meals (Table 12). This is followed by cassava, which contributes just under one-fourth of all carbohydrate consumption in meals. Finally, wild tubers and other starchy foods (including sago) are least important, although they still contribute almost one-fifth of the total carbohydrate consumption in meals.

**Table 13. Types of carbohydrate of all meals consumed by the two households, Sako Tulang (n = 1,012)**

Type of carbohydrate	Frequency	Percentage
Rice	584	57.7
Cassava	238	23.5
Wild tuber and other starchy food	190	18.8
<b>Total</b>	<b>1,012</b>	<b>100.0</b>

This pattern corresponds well with the origin of the different types of carbohydrates (Table 13). Unsurprisingly, the majority of carbohydrates is bought from the shops and the markets in the nearest village such as S.P.A. This is to be expected since the Sako Tulang households consume rice on a regular basis, but do not grow rice themselves. However, they do grow cassava, which is visible from the corresponding figure in Table 13, which shows that the root-crop harvested from the garden in practice is always cassava. All homesteads are surrounded by cassava plants (*betong hubi*) and households also easily share their cassava harvests with each other. Thus, tubers are the second most important staple food, after rice. Every component of the plant is used: the root (*akar*) is eaten as a staple, the stem (*betong*) is used as firewood, and the leaves (*doun*) serve as vegetables. Cassava is also an important emergency food during the lean months, alternatively known as the *remayo* season. Whenever the group runs short on money to buy rice as the main staple food, they often fall back on their cassava as the substitute of rice. The same situation applies when hunting and fishing have not been successful or whenever their yields of commercial crops drop. Since cassava is very easy to plant and also requires little labor in terms of weeding, this plant is also very useful during the *melangun* period. Cassava is always planted near the settlements of the Orang Rimba, whether they practice *melangun* or not. In addition to its importance as food, cassava is strategically used to mark territorial boundaries. My informants explained to me that they deliberately create small *hompsongon*<sup>36</sup> of cassava hedges to protect their territories from pressure by outsiders.

Wild tubers and other wild starchy foods (such as starch obtained from some kinds of palms) are obtained in two main ways: either they are directly collected from the forest, or they are received as a share of someone else's gathering activities in the forest ('given' in Table 13). If we combine these two, the total contribution of carbohydrate-rich foods originating from the forest adds up to just over 17%.

<sup>36</sup> Usually, *hompsongon* consists of rubber trees but cassava is sometimes also used.

Origin	Frequency	Percentage
Buying	597	59.0
Collecting from the forest	101	10.0
Harvesting from the garden	238	23.5
Given	75	7.4
Unknown	1	0.1
<b>Total</b>	<b>1,012</b>	<b>100.0</b>

Another important note on the carbohydrate intake in the Sako Tulang group is that rice and/or tubers are often prepared as a porridge, which is enjoyed by both adults and children. Salt or sugar are added to the porridge, and if meat is available this may be included too. Cooking porridge is not a laborious process and is typically done when nobody is out in the field or forest. Cassava needs to be soaked, cleaned, and pounded before cooking it.

#### **Composition and origin of animal protein**

The second major food group present in the Sako Tulang food record is animal protein, which appeared in a total of 781 meals (74% of all meals consumed). The composition of this food group is highly varied, consisting of ten main categories<sup>37</sup> in the case of Sako Tulang (Table 14). In addition, the category 'combination' includes a combination of either wild pig and fish, or wild pig and snake.

Interestingly, freshwater fish is the main source of animal protein. While this category evidently consists of a large number of individual species, their identification was beyond the aim of this study. Aside from fish, rivers also provide another important source of animal protein to the Sako Tulang households, namely freshwater turtle. Taking these two categories together, freshwater fauna account for over two-thirds of all meals with animal protein intake. The remainder consists of larger and smaller terrestrial mammals (notably wild pig, hedgehog, and deer) as well as snakes.

Based on my observation in the Sako Tulang group, the majority of fish eaten came from fishing rather than from the market. The settlement is situated close to the Sako Tulang River, a rivulet of Makekal River, which is abundant with fish. It is less than a one-hour walk from the settlement in Sako Tulang to the river. A fishing net is usually set out in the late afternoon, and when it is pulled up the next morning it usually contains a large number of small and medium-sized fish. In addition, fish is also incidentally bought from the Saturday market or from the fish ponds belonging to transmigrants in S.P.A.

Fishing is better in the dry than in the rainy season. The fishing season runs from June to September, with a peak in August, while the period from October to December shows a drastic decline. During the transition month of September and October, when the water level in the river starts to rise, the Sako Tulang group shifts towards hunting, which is continued until the end of the rainy season. However, even in June-July, hunting regularly

<sup>37</sup> See Chapter VI for a full list of animals consumed per group.

happens. This was especially the case in June 2013, during which I saw many husbands from Sako Tulang leave their families for about three to four days per week to engage in hunting trips in remote areas, going as far as the border between Riau and Jambi provinces.

**Table 15. Types of animal protein of all meals consumed by the two households, Sako Tulang (n = 781)**

Type of animal protein	Frequency	Percentage
Fish	459	58.8
Wild pig	106	13.6
Freshwater turtle	57	7.3
Hedgehog	39	5.0
Snake	37	4.7
Deer	30	3.8
Mouse deer	6	0.8
Bird	2	0.3
Frog	2	0.3
Lizard	0	0.0
Squirrel	0	0.0
Rat	0	0.0
Primate	0	0.0
Other	33	4.2
Unknown	10	1.3
<b>Total</b>	<b>781</b>	<b>100.0</b>

*Note: There is usually only one type of animal protein in any meal without combination with the other types of animal protein.*

Looking at the origin of the various types of animal protein (Table 15), over 65% of it is derived from 'own production', namely through fishing and hunting. In addition, a large share is received from others as a share of their fishing and hunting catch. There is a strong sense of communality among the Sako Tulang group. This is manifested in the sharing of foodstuffs, especially wild animals from hunting activities, by those who have enough with those who face shortages.

Sharing food among households is meant to ensure that the household that gives out food to others today will in future have certainty of food from those householders that are beneficiaries of the offer. Moreover, sometimes proceeds from hunting are too large for a single household to eat even if efforts are made to preserve it. The contributor expects households that receive the contribution to do the same when time comes for the giver to have food shortage. During *melangun*, meat is sometimes shared by an Orang Rimba group who are not in a *melangun* period and who have enough meat to share.

I witnessed the following example of food sharing during my fieldwork in 2013. At that time, my key informant and three fellow Orang Rimba went to stay at the Bengkulu border to hunt. They spent three nights in the camp and came home bringing a large snake as a result of the hunting. Because the snake was big, they divided it into pieces. The wife of my key informant distributed the meat into several baskets, and kept a large amount

of the meat for her own household for several days, and then distributed the rest to the members of the group. All of the group members experienced having meat that according to them was the most delicious meat ever. Even though all of the group members had enough meat for several days, there still was a substantial amount of meat left that could be shared beyond the group. My key informant then allocated the remaining meat to his mother's family residing in a different group the next day.

The dependency on food sharing is greatest during periods of scarcity, caused by a prolonged dry season or while doing *melangun*. These often induce the Sako Tulang members to seek help not only from within the group but also from the other groups that still have close ties with the members of the group, for example from the nearest group: the Sungkai group. Sometimes, they also ask help from transmigrants or Malay middlemen, with whom the Sako Tulang group have good relations and some of whom provide goods such as rice, cigarettes, sugar, salt, and instant noodles on credit, which is repaid after harvest.

In sharp contrast to carbohydrates, almost none of the animal protein is obtained by purchasing it. The Sako Tulang group have a strong taboo on eating domesticated animals. That is why, even during lean periods, they do not eat chicken, cow, or goat meat, nor even eggs. In exceptional cases, and only if they can afford it, they eat canned fish. Thus, we can conclude that forest-based fishing and hunting activities generate almost all animal protein that is consumed by the Sako Tulang households.

In terms of food preservation, there are some techniques applied by the Orang Rimba. The most common one is known in local terms as *salaue*. *Salaue* is one of the ways the Orang Rimba preserve their foodstuffs, which includes smoking, cooking, and fermenting. It is a traditional method that makes it possible to keep the meat for several days. Cooking slowly over a fire for many days, inducing it to rot, also preserves animal protein.

**Table 16. Origin of animal protein of meals consumed by the two households, Sako Tulang (n = 781)**

Origin	Frequency	Percentage
Hunting	153	19.6
Fishing	359	46.0
Given	222	28.4
Buying	6	0.8
Others	31	4.0
Unknown	10	1.3
<b>Total</b>	<b>781</b>	<b>100.0</b>

#### **Vegetables and fruits**

The Orang Rimba rarely eat vegetables. They are not fond of it and they are also not aware of the nutritional value of vegetables. Even though wild vegetables are widely available in the forest, consumption of vegetables is limited to the cassava leaves that grow in gardens. Incidentally, so-called "smelly forest beans", which grow locally on a tall tree called *pete*, are also eaten.

With respect to fruits, as for the Orang Rimba in general, the Sako Tulang group mostly consume fruits during the fruiting season<sup>38</sup>. Fruits are rarely consumed as part of main meals, but if fruits are available from their gardens, in the forest or on the market it may be eaten as a snack. However, when the fruiting season comes, fruit becomes the main food for the Orang Rimba. Examples of such fruits are durian and rambutan. Interestingly, the members of the Sako Tulang group are fond of fried banana (*pisang goreng*) which can be bought on the Saturday market in S.P.A., but they do not like fresh banana as a fruit.

### 3.3 Conclusion

The Sako Tulang group enjoys relatively adequate food intake in terms of quantity and quality. Meals are regularly eaten, with 97% of all potential meals being consumed. There is also considerable variation in food consumed, with abundant carbohydrate and protein intake. Food is obtained from various sources: by buying it, by collecting/hunting/fishing, and by growing it in their own gardens.

It is evident that rice is the dominant staple that is consumed by households in the Sako Tulang group. This finding is in line with my earlier assumption that the Sako Tulang group is dependent on market products and cash income. In this group, most of the households rely on rubber plantations as their main source of livelihood. It is not surprising therefore that there is a shifting pattern of staple consumption from traditional tubers to rice.

Group members use the income they obtain from selling rubber, and other economic activities that generate cash, to buy rice. Even though rice is indeed the dominant source of carbohydrates, it is followed by tubers as the second most important staple. In the wet season, meat is abundant, due to successful hunting. In the dry season, the Sako Tulang group depends heavily on fish, *labi-labi* (freshwater turtles), snakes, and tortoises, which live in dry riverbeds.

Based on general observation during the fieldwork, the Sako Tulang men, women and children make a relatively healthy impression. The youths, especially, are relatively tall and athletic, while only few people, notably elderly, are thin and appear less healthy. It seems to me that the Sako Tulang group do not really experience hunger and that they are reasonably food secure as a result of their continued ability to hunt, while they also manage to adopt a sedentary farming life and become middlemen.

Sharing is an important element of food security for the group. This practice is in line with Headland findings (1986, 1987, 1991) on how hunter-gatherers use a reciprocal food sharing system. In his dissertation in 1986, Headland mentions the importance of food sharing among the Agta, including commodities such as rice and subsistence crops like cassava and sweet potato (Headland 1986: 424). Headland has observed for the Agta that “the best place to store food is in other people’s stomachs” (Minter and Headland in press).

Cultural and geographical landscapes define the Makekal Hilir Orang Rimba groups, who in general have close ties with the Orang Melayu. A patron-client relationship has evolved between the groups in the course of history, which continues with some adjustments

<sup>38</sup> See Chapter I (methodology section) for an explanation of the limited presence of fruits in the daily food intake records.

to this day. Living closer to Orang Melayu groups than the upstream and more mobile groups of the Makekal Hulu area, the Sako Tulang group has more exposure to a sedentary lifestyle and swidden cultivation (*bertalang* or *membuka hutan*) and they have themselves become sedentary.

Living within close reach of the Bukit Duabelas National Park and the transmigrant settlements, the Sako Tulang group strategically makes use of the opportunities offered by both the forest and the nearby markets. The transmigration settlements of S.P.A. and Tanah Garo serve as a place to sell rubber and non-timber forest products, for liaising with the *waris*, for buying basic needs and for making use of public services, such as health clinics.

Living on the forest margins, the Sako Tulang group continues to combine a hunter-gatherer lifestyle with that of sedentary farmers. The Sako Tulang group relies on fishing and hunting to meet their protein requirements and use the income they earn from rubber and oil palm to supplement these wild foods with commodities they purchase from villages.

The social and natural landscape in which the Sako Tulang group lives, outside the national park, but not far from the transmigration settlements, provides them flexibility in obtaining their food products, enabling them to switch between heavily depending on natural resources and purchasing food.

Rubber is the key commodity for the Sako Tulang group and it has a significant impact on the lifestyle, the cultural identity and the food security of the group. This is because rubber, unlike the traditional crops that they used to gather and grow, can be sold and thus generates cash, which has become increasingly important. In relation to rubber, there are two crucial periods that are associated with *remayo* season (hardship period) for the Sako Tulang group. First, the period before they owned rubber fields and cleared land for planting. The Sako Tulang group considers land-clearing as very demanding in terms of labor and capital. The second period occurs when tapped rubber prices decline. During such periods of hardship, the Sako Tulang group depends on relatives or fellow Orang Rimba. Mutual support and assistance among the groups help them to overcome financial difficulties and they are also a source of cohesion that mitigates the severity of a crisis. Even though some of the households have relatively stable fields, they are still in the process of expanding the existing fields in order to maintain stability of the rubber harvest in the long run.

