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

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An Orang Rimba man in Terab area is going out to buy some groceries, 2014

V The Air Hitam Group: Living Inside the National Park

The Air Hitam group is located in the Bukit Suban area that has been one of my fieldwork sites since the very start of my ethnographic research among the Orang Rimba in 2007. It is located in the southern part of the Bukit Duabelas National Park and is administratively located in two regencies, namely *Kabupaten* Sarolangun and *Kabupaten* Batanghari. The Bukit Suban area is the third fieldwork location for my PhD research. It represents those Orang Rimba living inside the protected forest of the Bukit Duabelas National Park.

My first visit to Bukit Suban was in 2007. At that time, it was still rare to encounter the Orang Rimba from this group, who commuted from the forest areas to the surrounding villages of the Bukit Suban. If they were around, they were commuting on foot, bringing non-timber forest products like rattan for sale or carrying the daily groceries bought in the village back to their settlement. However, by mid-2012, when I carried out my PhD fieldwork, things had changed. Before approaching the border zone of the national park, I saw many of the Orang Rimba in the transmigration village of Satuan Pemukiman I (S.P.I.), precisely in the Bukit Suban center, doing their daily business, such as selling their rubber and NTFPs or shopping for groceries while using motorbikes.

Most people would perhaps not recognize the current appearance of some of the young Orang Rimba. They use the new types of motorbikes, they have updated cellphones, and they wear fashionable clothes. When they ride a motorcycle it is always the latest model, and they wear gloves and a trendy helmet. Their cellphones are filled with apps, including music apps with famous Indonesian songs. All of this is seen as 'normal' for Indonesian teenagers who live in the modern world. But for young Orang Rimba from the forest it is extraordinary. Those trendy young people are the young generation of the Orang Rimba from the Air Hitam area. At the same time, despite their trendy appearances, they are also still proud of their identity as Orang Rimba by showing 'their differences' from others. This now typical situation is a result of increasing interaction between the Orang Rimba in this area and other ethnic groups like the Malay people or the Javanese transmigrants.
This chapter discusses the current condition of the Air Hitam group who still continue to live inside the forest. The structure of this chapter is similar to that of the previous two chapters. The first part presents an ethnographic description of the group, especially the landscape and the settlement, the composition of the group, and its modes of livelihood. The second part will focus on the food production and consumption based on the results of the daily intake.

5.1 Ethnographic background to the Air Hitam Group

The Orang Rimba living in the area of Bukit Suban form part of the Air Hitam group, which comprises various smaller groups, namely the Paku Aji, the Semapuy, the Keruh, the Punti Kayu, the Tengkuyungon, the Gemuruh, the Kedundung Muda, and the Air Behan. The main analysis in this chapter focuses on the Punti Kayu and Kedundung Muda groups who are living in the watershed of some of the river branches of Air Hitam, the main river in this area.

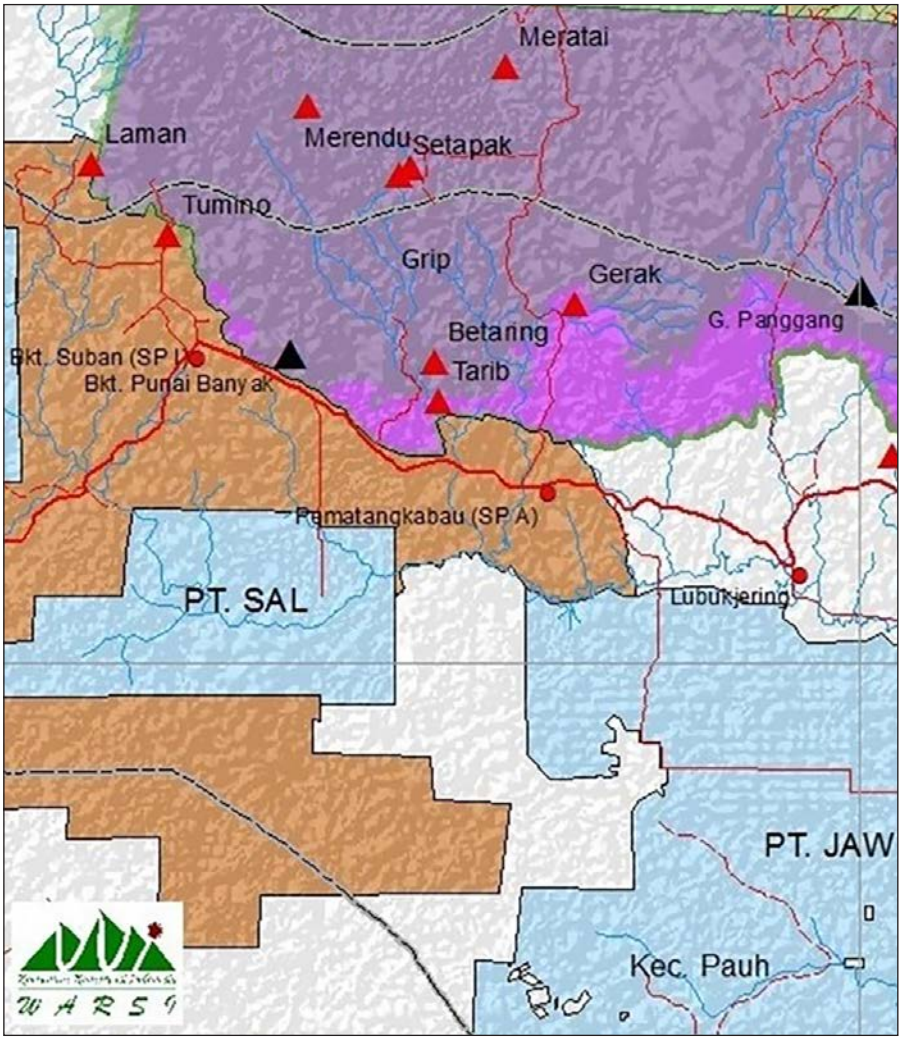

Figure 47. Map of location of the Air Hitam group in the southern part of Bukit Duabelas
Source: WARSI's map adapted by author, 2012-2014. Note: the red triangles are the resettlement areas of the Orang Rimba.

Figure 48. An Orang Rimba man of the Air Hitam group

For the purpose of simplification, in this chapter I will refer to these groups under the larger group name of the Air Hitam group. They live in a diverse landscape that allows them to diversify their livelihoods, which comprise rubber field management, hunting wild animals and collecting NTFPs. These locations also have a specific purpose for maintaining their cultural tradition of *melangun*. Since I have known most of the people from this group since 2007, almost all members of the group have been my informants for this research project. However, for the purpose of my food intake data, I picked only two households that are both originally from the Kedundung Muda group.

Landscape and settlement

The area in the southern part of the Bukit Duabelas National Park has been influenced by the transmigration projects and the oil palm plantations. PT. Sari Aditya Loka (PT. SAL) operates in this area, which is the branch of a giant plantation company in Indonesia called Astra Agro Lestari Tbk, which specializes in maintaining oil palm plantations. Inside the park, which still has some areas of relatively intact forest, there are two main rivers, the Air Hitam River and the Makekal River. These two rivers have smaller branches. In the watersheds of these branches many groups of Orang Rimba make their homes.
The homestead of the Air Hitam group is situated in the southern part of the park and

Figure 49. A *rumah ditano* in Air Hitam group

Figure 50. The resettlement project by the Office of Ministry of Social Affairs for the Air Hitam group

very close to S.P.I. village (Satuan Pemukiman I village). The distance between the village and the park's border is less than one kilometer. Moreover, right before entering the park, there is a field office of WARSI, which is used for Orang Rimba matters. It is a meeting point for customary purposes, temporary shelter, and an education center for the youth and a transit point for other parties who want to contact the Orang Rimba inside the park. This hub provides comfort and confidence to the Orang Rimba, making them more mobile[62] outside the forest and exposing them to other communities. In turn, this brings more economic opportunities in terms of commercial trading of the non-timber forest products. Such situations induce the Orang Rimba to become more active in their 'outside world' and they also get more involved in the cash economy. However, at the same time they also still refer to the Bukit Duabelas Forest as their home and main source of livelihood.

Inside the park, most of the Orang Rimba in this area live scattered in individual households along the banks of the rivers. Inside the forest, the Orang Rimba have three kinds of housing: *sesudungon*, *rumah ditano* and *rumah godong* (for details see Chapter II). Households in the group usually have these three types of houses for different reasons. *Sesudungon* are used for practical reasons of mobility and are particularly useful if the group is doing *melangun* or opening/managing a rubber field. *Rumah ditano* houses are bigger than *sesudongon* and have a more permanent structure with more functional rooms. Recently, the Orang Rimba in this group have opted to stay close to their rubber fields in the *rumah ditano* type of housing. Living in *rumah ditano* or *rumah godong* is a sign of a stable household.

Since 2010, the government through the Office of the Ministry of Social Affairs developed a new resettlement project for the Orang Rimba in this location. The houses are built in the vicinity of the national park. Even though the government has constructed the permanent houses, the Orang Rimba only use them for temporary purposes such as a transit shelter during the market days. This can be understood since the permanent houses are of a very different type and also their location is not according to the cultural preference of the Orang Rimba. Moreover, the houses are without proper facilities such as a water source. Some of the houses are sold to members of other ethnic groups, while there are also houses that are simply abandoned altogether.

The composition of the group

As mentioned, the Air Hitam group consists of smaller groups. There are two *tumenggung* in charge of the people living along the Air Hitam River. One *tumenggung* is in charge of six small groups, the other is in charge of two groups. The leader of the groups who live in six different watersheds in the southern part of the national park is *tumenggung* NR. Table 24 below depicts the composition of the population in the Air Hitam area.

[62] Since the building was developed, the Orang Rimba in this group did not hesitate to come out of the forest for various activities such as selling their non-timber forest products, shopping for groceries, or conducting customary meetings in the building. Besides using the building as an education centre, WARSI also established the local radio station run by the Orang Rimba youths. For these reasons, the Orang Rimba are not "shy" any more and more open to interact with the other ethnic groups. In short, the Orang Rimba in this group are more mobile ever since the establishment of the building.

Table 25. Number and size of households of the Air Hitam Group under *tumenggung* NR, 2014

No	Location of river branch	Number of households	Number of people
1	Keruh	20	89
2	Punti Kayu	28	134
3	Tengkuyungon	7	24
4	Gemuruh	16	75
5	Kedundung Muda	13	70
6	Air Behan	21	91
	Total	**105**	**483**

The total number of people living in the southern part of the park was 576 based on calculations by BPS and WARSI in 2010. This population was spread along the main Air Hitam River. The two groups are the Paku Aji Group and the Semapuy Group, and there are 19 households in these groups with a total of 93 people. These two groups mainly live in the plantation areas belonging to PT. SAL. Meanwhile, the other groups under *Tumenggung* NR's leadership are those who live inside the park. They comprise of 105 households and a total of 483 people.

Modes of livelihood

Nature guides the Orang Rimba in terms of a specific timeline for undertaking activities such as hunting, gathering, and farming. One example is the importance of the river. Rivers have influenced how the Orang Rimba arrange their farms (*ladang*), groups, houses, and they also determine the borders between them and the Orang Terang.

According to Japarudin (2014), the river is the second most important thing for the Orang Rimba after the forest (Japarudin 2014: 26). According to the Orang Rimba, the river is important because it is one of the life sources of the Orang Rimba. It provides a source of food in terms of fish and other freshwater protein for them. The Orang Rimba also depend on the river for many other needs such as drinking water and water for cooking, washing, bathing, and watering their gardens. For their daily needs, the Orang Rimba are not familiar with wells or other types of water technology. Therefore, the Orang Rimba's settlement is always close to the river, whether it is small or big. Accordingly, the group of Orang Rimba is attached to the name of the river in their vicinity, such as Makekal, Air Hitam, Kejasung, Terab, and others.

Rubber planting and tapping is among the main livelihoods of the Orang Rimba of Air Hitam. According to my informant, rubber was introduced to the Orang Rimba by the Malay people in the early 1980s. Cultivating rubber has now become a main source of livelihood for the Orang Rimba. The Orang Rimba living in the southern part of the national park create rubber fields by opening up the forest and slashing and burning the trees and other types of vegetation. However, due to the shortage of labor and tools, the Orang Rimba are only able to open a forest field once every two to three years and, on average, they can only manage between 0.5 and five hectares of land for rubber growing. The more family members they have, the larger the field. Approximately 1,000 rubber seedlings are required for a rubber plantation of one hectare. Over time, the Orang Rimba

have recognized that having rubber fields is more beneficial than only depending on the hunting and gathering activities for them in terms of income generation. This is because they are able to earn cash income by selling the rubber latex. A hectare of rubber trees can yield, on average, IDR one million or $US 75.10 per month for the Orang Rimba. Growing rubber is a long process. At least, a farmer needs to have a substantial amount of land. He also needs good quality seedlings and above all he needs labor to manage the rubber fields. Rubber trees need hot and moist weather. The Orang Rimba open the land very slowly. They use simple tools such as machetes and axes to cut the trees and slash the rest of the vegetation. After some time, when the weather has been dry and hot enough, they burn the withering vegetation. Once the land is cleared, they will wait until the land is ready to be planted. They usually buy the rubber seedlings in the nearby villages or sometimes they have a middleman contact to provide them with the seedlings. After finishing the planting of the seedlings, the Orang Rimba have to wait at least seven years to start the tapping of the latex or when the tree reaches a circumference of 45 cm at 100 cm height from the ground. As mentioned in the previous paragraph, I made an average estimation of the rubber production in the household level of the Orang Rimba, which is around $US 75.10 per month depending on the various enabling factors that influenced the production such as number of family members (laborers), the available land, the seeds, and the price of the latex (demand side factor).

In addition to rubber, the other sources of livelihood that the Orang Rimba of Air Hitam have to supplement their household incomes include gathering forest products such as rattan (*manau*), *jernang,* and honey. The process of searching for rattan, referred to as *memanau* (rattan collection), is carried out throughout year, which is in contrast with the collection of honey. As far as *jernang* or 'dragon blood' gathering is concerned, this work is done in groups due to the difficulties of collecting the rattan fruits.
For the Orang Rimba in this area, *memanau* is done once a month to complement their source of income. The duration of a trip to collect *manau* is about two weeks, with on average one to two hours of work per day. During *memanau*, the Orang Rimba will stay in a small group and build a simple *sesudungon*. During these rattan collection expeditions, the men also hunt nearby the camp, while the women usually stay in the camp to prepare the food for the family. Sometimes they also do fishing and preparing the rattan to be transported for sale. In between activities they rest and chat. The result of two weeks work is about 160 pieces of *manau* with a length of two to three meters. The Orang Rimba earn IDR 500,000 or $US 37.55 for 160 pieces.
Another important source of livelihood is hunting. Hunting wildlife provides a vital source of animal protein for the Orang Rimba. Hunting, which can be done by an individual or a group, involves men with a minimum age of 12 and it is done, on average, twice a week. There is still a wide range of animals inside the forest, including wild pigs, deer, and mouse deer. Wild pigs are the most commonly hunted animals and they are the Orang Rimba's favorite catch in this area. In a month, they usually catch a few animals, which allows them to consume animal protein almost every day, even though sometimes the hunt fails. The supply of animal protein from hunting is plentiful, either from their own efforts or from what is received from fellow Orang Rimba. When there is a surplus, especially in the rainy season, the Orang Rimba earn money by selling their catch. The most commonly sold meat is mouse

Figure 51. Transporting rubber latex after the harvest by the Orang Rimba youth in Air Hitam, 2013

deer, which fetches a price of about IDR 450,000 or $US 33.80 per small animal. Meanwhile, wild pigs are sold to a Batak middleman in S.P.I. for IDR 4,500/kg or $US 0.34/kg.

Relations with the outsiders

According to the Orang Rimba's world view, Jambi society has two levels: the Orang Rimba and the 'other world' or the world of the Orang Terang, which includes the incoming transmigrants (mostly of Javanese and Sundanese descent) and the Orang Dusun, a reference to the Orang Melayu. The interaction between the Orang Rimba and these other ethnic groups has intensified over time, especially over the last few decades, with the arrival of transmigrants in Jambi.

In order to maintain their internal strategies for facing various changes, the group has developed a policy of mutual assistance. Such an approach is very common within the Air Hitam group, especially in *remayo* season. The Air Hitam group usually does not borrow money or products from people outside their own community. This is due to previous experiences that resulted in them being manipulated by people from outside. There are stories of Orang Rimba from other groups borrowing money from outsiders, using their land as security. When they failed to repay the debt, the Orang Rimba lost the land, including land inside the national park. Some of the things the Orang Rimba borrow from other members of their group include sugar, coffee, or rice. Limited barter trade often supplements the reciprocal exchange. For example, people exchange petrol for sugar. The Orang Rimba use such a strategy to meet their daily needs. It is evident that whenever the group faces food shortages, they often call on the assistance of close family members (parents, parents-in-law and cousins). In the event that relatives cannot help, they will approach their closest neighbors.

In terms of external assistance, the government has implemented several resettlement and livestock programs in the Air Hitam region. However, these programs have generally failed as they do not fit with the Orang Rimba's livelihood and culture. As was mentioned above, the houses from resettlement programs either ended up abandoned or they were sold to other ethnic groups. 61 houses were built for the same number of Orang Rimba households in the Bukit Suban area (in the Punti Kayu 1 area) by the time I was doing my fieldwork in 2013. Each household received a house of simple wooden board, two bedrooms, one living room and a simple kitchen. It had a tin roof and a cement floor. In addition to that, the Social Office of Jambi provided a monthly allowance for eight months to the 61 households. The office also provided the agricultural seeds to the Orang Rimba and assigned the head of village and a professional agriculture trainer to assist the Orang Rimba in doing basic farming for one year. However, the resettlement project did not turn out as planned by the government because the Orang Rimba consider that having a permanent house and doing farming are against their traditional way of life.

Sometimes the Orang Rimba sold their resettlement house to transmigrants. The increasing number of transmigrants in/near the national park has compounded the problems that the Orang Rimba face caused by deforestation. The houses entitle owners to land ownership, which poses the danger that owners may one day decide to open up oil palm or rubber plantations in the national park, which will further reduce the Orang Rimba's habitat.

5.2 Food production and consumption

The Orang Rimba who are still living inside the forest have specific ways of preserving food. They have special knowledge about edible flora and fauna, which is closely related to their concepts of time, space, seasons, and nature. In combination, these factors differentiate the cultural aspects of food they consume and the ways to obtain it.

The following discussion of the food consumed by the Air Hitam group is based on my fieldwork data with respect to the daily intake gleaned from two households in a six-month period between November 2013 and April 2014. This period was chosen because it covers both the dry and wet seasons. The two households were chosen as representative for the daily intake data collection of the Orang Rimba living along the Kedudung Muda tributary. They were the households of *Mangku* BS and PB. Both households depend on rubber plantations and other traded NTFPs.

At this location, I hired young people to act as my field assistants to make records of the daily food intake and as my porters, since the compound was inside the forest and only accessible on foot. The field assistants helped me with routine tasks such as cooking, looking for firewood, and drawing water from the river. They also accompanied me while trekking in the durian forest, with interviewing people, and to collect data. One also acted as my driver when I travelled in the area on motorbike. In total I had three field assistants in Air Hitam, however, there was one who played the role as my main assistant and was tasked with recording daily food intake, namely BD. He is BS's son and later on he became a son-in-law of PB. These two informants and heads of households are classified as *rerayo* and were knowledgeable about Orang Rimba customs. While BS has an important political position as a *mangku* or a person who is in charge of custom-related issues, PB holds no such political position within the group. As a *mangku*, one of BS's roles is to handle political related matters for the Orang Rimba, both inside among their group and outside with the other groups or other communities. Any policies from the official authorities from the government agencies that are to be communicated to the Orang Rimba are discussed with the *tumenggung* as well as with the *mangku*. In return, any policies or decisions regarding the political stands from the Orang Rimba to the government agencies are also communicated through the *mangku*. Meanwhile, PB has no political position in the group. I consider these two households as representative for those having a political position with a high exposure to the Orang Terang as well as for those whose exposure is limited to the group itself.

Overall food intake and meal composition

The pattern of eating meals discernible from the data collected on the two households is depicted below (Table 25). Overall, it can be said that the two households had adequate food consumption based on the frequency of having regular breakfasts, lunches, and dinners. However, the data show that compared to HH1, HH2 showed lower frequency of eating breakfast and lunch, but it had a higher frequency of dinners.

Table 26. Types and numbers of (potential) meals consumed per household, Air Hitam

Potential meals consumed	Actual meals consumed				
	Frequency			Percentage	
	HH 1	HH 2	Total	HH 1	HH 2
Breakfast (n = 180 for HH1 and n = 60 for HH2)	180	158	338	100.0	87.8
Lunch (n = 180 for HH1 and n = 60 for HH2)	169	160	329	93.9	88.9
Dinner (n = 180 for HH1 and n = 60 for HH2)	176	177	353	97.8	98.3
Total (n = 540 for HH1 and n = 180 for HH2)	525	495	1,020	97.2	91.7

Based on the data collection of the presence of different food groups in all meals, in both households carbohydrate was the most consistently consumed food group. It was present in 96% of the meals. The second most important food group was animal protein, which was present in 70% of the meals. In contrast, the consumption of vegetables was quite low; it was part of less than 5% of all meals consumed by both households. The Air Hitam groups acquired the vegetables they consume by gathering or collecting them from forests as well as by cultivating them in their fields (*ladang*). The most common vegetables consumed were cassava leaves, string beans, and cucumber, while the consumption of fruit follows the fruit season and its availability.

Table 27. Presence of different food groups in all meals consumed per household, Air Hitam (n=1,020)

Type of food	Frequency			Percentage		
	HH 1 (n = 525)	HH 2 (n = 495)	Total	HH 1	HH 2	Average
Carbohydrate	501	475	976	95.4	96.0	95.7
Animal protein	366	348	714	69.7	70.3	70
Vegetable	20	8	28	3.8	1.6	2.7

Composition and origin of carbohydrates

Carbohydrate plays an important role in the food consumption of the Orang Rimba in general, in fact it is the main component of their intake. In terms of types of carbohydrate consumed by this group, it can be classified as 'adopted' carbohydrate (rice) and 'foraged' carbohydrate. The foraged carbohydrate is collected using traditional knowledge and include *hubi kayu* (cassava), *keladi* (taro), as well as wild tuber and other starchy food (such as *benor*/yam, *gadung*/yam and *tebu*/sugar cane). Over the last few years however, rice has become the major staple, following the example of their village-based neighbors. This is attested to by the intake data collected during the fieldwork as well as my observations.

Table 28. Types of carbohydrate of all meals consumed by the two households, Air Hitam (n = 976)		
Type of carbohydrate	**Frequency**	**Percentage**
Rice	567	58.1
Cassava	313	32.1
Wild tuber and other starchy food	96	9.8
Total	**976**	**100.0**

The average number of meals containing rice of the households in the Air Hitam group was over 50%. It has become the main carbohydrate. This is despite the fact that the households still live inside the Bukit Duabelas Forest. This means that geographical location does not have a significant impact on their dependency on the market for rice. Rice has become the major staple for the Orang Rimba, regardless of where they live. Indeed, rice is slowly but surely replacing their traditional staples. The main reason the households opt for rice over their traditional staples is that they have become accustomed to eating rice, often since childhood. If they are forced to eat tubers due to a shortage of income, they often find that the non-rice carbohydrate does not give them a sense of having full stomachs. This is despite the fact that the group still recognizes the importance of tubers as a great source of energy for their menial activities such as hunting or tapping rubber.

One of the key informants said the reason they prefer rice over tubers is that rice is easy to buy from markets, easier to cook, and can be stored for longer than a month. By contrast, storing tubers is not easy as they have to be eaten as soon as possible before they rot. Households that are dependent on tubers must allocate more labor for the daily cultivation and preparation of the crops.

Despite the clear shift towards rice, tubers remain important for the households. Tubers are supplemented with meat caught during hunting expeditions. According to my key informants, having meals with meat from wild game caught from the forests is more satisfying than eating just rice.

In terms of taste, my informants consider *benor* as the most delicious tuber, which they obtain by digging nearly a meter into the ground. Meanwhile, they rarely ate *gadung*, which is a relatively unfamiliar product to them. Preparing *gadung* is difficult as it requires sufficient knowledge to prepare the yam, otherwise it can be poisonous. To be eaten safely, *gadung* should be sliced slightly and stored inside a bag, after which it is immersed in the running water of the river for at least five days. After removing it from the water, *gadung* should be put in the sunshine for a few days. The Orang Rimba classify *gadung* as a famine or emergency kind of food, which means that they only eat it during *remayo* season or in times of hardship.

Growing cassava, by contrast, is an easy task for the Orang Rimba. They only need to plant a branch of the cassava tree in the ground and then wait for it to grow, without any other care or treatment. They only have to protect the plants against wild animals (especially

wild pigs and primates) during the early stages (Sandbukt 1988). There is also no need to worry about pests since the forest is usually free from pests that harm cultivated crops. According to my key informants, the taste of cassava from their own garden is much better and sweeter than that of cassava from outside of the forest.
Cassava growing is usually done in September when the rainy season begins and the rainfall is just enough, making it a good time for planting. Consumption of cassava occurs between January and June when the dry season (*kemarau*) begins. Cassava in Air Hitam in particular and inside the Bukit Duabelas Forest in general requires three to four months to mature.

The sources of carbohydrates for the Air Hitam group were varied: buying, collecting, cultivating, and giving. Table 28 below reflects the origin of carbohydrate consumed by the two households.

Table 29. Origin of carbohydrate of meals consumed by the two households, Air Hitam (n = 976)

Origin	Frequency	Percentage
Buying	577	59.1
Collecting from the forest	33	3.4
Harvesting from the garden	293	30.0
Given	70	7.2
Unknown	3	0.3
Total	**976**	**100.0**

Based on my field observations, it is clear that the collection of certain foodstuffs, especially tubers, is done in the morning and in the evening. Usually, the homestead compound is located near the source of foodstuffs, which is where the tuber gardens are often located. Cooking is the responsibility of women, who do it in the morning and evening, before and after the men are engaged in activities in rubber fields or other activities in the forest, not far from homestead compounds. Lunch often consists of the leftovers from breakfast and the two households rarely cook during lunchtime.

Composition and origin of animal protein

In terms of animal protein consumption, my findings indicate that fish was most important, followed by wild pig, freshwater turtle, and snake, among others (Table 29). It is important to note that the high consumption of fish in this area is based on the fact that the households in this group are very fond of fish, which they acquire by either fishing from the river or buying it from the market in S.P.I.

Table 30. Types of animal protein of all meals consumed by the two households, Air Hitam (n = 714)

Type of animal protein	Frequency	Percentage
Fish	368	51.5
Wild pig	102	14.3
Freshwater turtle	101	14.1
Hedgehog	34	4.8
Snake	47	6.6
Combination of above	12	1.7
Deer	30	4.2
Mouse deer	12	1.7
Bird	8	1.1
Total	**714**	**100.0**

I was surprised by the high consumption of fish, because initially I expected that meat of forest mammals would be the most important animal protein eaten since the Air Hitam group still live inside the forest. Based on the data collected from the two households, it is apparent that animal protein obtained from hunting mammals on a monthly basis showed a lower frequency than animal protein from the freshwater resources. The 'peak season' for mammal hunting is November and December, during the rainy season. At the beginning of the transition from the rainy season to the dry season, which starts in January, consumption of mammal protein by the households declined.

Table 31. Origin of animal protein of meals consumed by the two households, Air Hitam (n = 714)

Origin	Frequency	Percentage
Hunting	206	28.9
Fishing	266	37.3
Given	219	30.7
Buying	12	1.7
Others	11	1.5
Total	**714**	**100.0**

Even though hunting of mammals is a year-round activity for the Orang Rimba in general, it often brings poor outcomes during the dry season. To that end, to supplement this shortfall, the households often intensify fishing activities in river beds during the dry season. That is why the families often switch sources of food in accordance with the season. During the dry season, when mammal game is relatively scarce, they consume more animals from the rivers, while during the wet season hunting for mammals in the forest picks up and becomes the main source of protein. Thus, it can be said that this group depends heavily on the river as their main source of livelihood, since their diet includes fish in both the dry and wet seasons.

Coping strategies

In general, the Air Hitam group uses three types of strategies to cope with food insecurity, namely household strategies, social strategies, and relying on external assistance (from the government and NGOs).

At the household level, when confronted with food shortages due to failed hunting expeditions, which often occur during the dry season, this group adopts the strategy of other Orang Rimba groups and reduces the quantity of food consumed, and they change the type of food. They start eating more soup for instance. Another coping strategy is to preserve animal proteins and other products obtained from hunting/gathering expeditions in order to deal with future shortages. Animal protein is smoked using *salaue*,[63] a traditional technique that makes it possible to store food for several days. It involves preserving the meat by cooking it slowly over a fire for many days, and inducing it to rot.

The social strategy for dealing with food shortages is sharing proceeds from hunting trips, either individually or within small groups. Hunting proceeds from individual or communal hunting expeditions are shared collectively, depending on the amount caught. This strategy of obtaining food for other members in times of shortage enables the group to overcome food crisis situations.

Coping strategies have included diversifying sources of food by growing cash crops such as rubber, providing menial labor to in-migrant communities, engaging in trade, food rationing, and sharing surplus food with friends. Government assistance has been ineffective as it focuses on acculturation through resettlement and lifestyle changes. The lives of the Orang Rimba in Bukit Suban are at a crossroads, as they adopt the lifestyle of transmigrants out of necessity, while continuing to stick to whatever vestiges of values, norms, and habits they can hang on to, in order to retain their status as a separate ethnic group, distinct from the majority.

5.3 Conclusion

Overall, it can be said that with the exception of rice, the Air Hitam group mostly depends on nature for its food. The wild animals, fruits, honey, and other types of food they gather from the rivers, the land, and the forests, constitute a surplus of food, which automatically secures their food needs, albeit temporarily. During the transition period, which follows the food surplus period, they have to resort to their rubber fields to supplement their income that allows them to buy food from the local markets.

The finding shows that the Air Hitam group has adequate food intake with high consumption of carbohydrate and moderate animal protein. Rice has become the major carbohydrate intake, followed by cassava, and lesser consumption of wild tuber and other starchy food. The Air Hitam group consumes a high variety of wild animals as their source of animal protein compared to the other two groups. Fish is the major component of the protein intake, while meat from wild pigs and freshwater turtles are more or less of

[63] *Salaue* is one of the ways Orang Rimba preserve their foodstuffs, which includes smoking, cooking, and rotting.

equal importance after fish. Other varieties of wild animal protein consumed by the group include snake, hedgehog, deer, mouse deer, and bird.

Sharing is a crucial part of the food intake among the Air Hitam group, aside from fishing and hunting. This group combines rubber growing with a dependency on the forest. Apparently, rubber is a suitable crop for the Air Hitam group to combine with other forest-based activities. It gives them an autonomous means to earn cash that helps them generate relatively secure sources of food and cash.
Sustainability of livelihood is discernible from the degree to which a community has long-term access to sufficient quantities and quality of food. Being so heavily dependent on the forest for their daily food provisioning, both continued access to and effective protection of the Bukit Duabelas National Park are therefore essential for the Air Hitam group.