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Good to produce, good to share: Food, hunger, and social values in a contemporary Mentawaian community, Indonesia

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Plenty of *Kat*, Lack of *Iba*: The Availability of and Access to Edible Resources

This chapter will describe and present a variety of ecological and quantitative data to demonstrate the availability and the access to food resources around the settlement. This chapter starts with the *emic* category of ecosystem. Understanding how people use the natural environment and create specific zones will enable us to examine the complex relations between Muntei residents and the environment, the pattern of resources' exploitation, and in particular, food availability and the access to food resources. The following sections will describe the availability of and the access to a wide range of food resources from plants and animals as well as imported food.

3.1 Manipulated Ecosystem and Productive Zones

People see the environment around their settlement as a vast resource containing edible and non-edible animals and plants, which can be exploited. They have established a tenure arrangement in which empty territory and unclaimed objects on it did not exist. All the land, rivers, caves, waterfalls, small lakes, mangroves, and other specific ecosystems have been occupied, named, claimed, and exploited. Each ecosystem and the resources on it are far from uniform, for reasons of their physical and natural character. The variations within those ecosystems are quite considerable, determining the ways people make use of them and the breadth of choice available in the selection of edible resources. Muntei residents have manipulated those ecosystems and classified them into specific zones, according to the objects or species cultivated or extracted from them, the aims and methods of appropriation and their arrangement. I call those used ecosystems 'productive zones' as each of them produces specific food resources through specific productive activities (Figure 7).

The major productive zones in Muntei include forests (*leleu*), bodies of water (*bat-oinan*), the sea (*koat*), sago gardens (*mone sago*), forest gardens (*pumonean*), taro gardens (*pugetekkat*), residential places (*barasi*), home-gardens (*bebet-uma*) and small islets and coastal zones (*nusa*). An area for keeping domestic animals has a specific term but it is normally part of the major zones such as the forest or sago gardens. Hence, pig-keeping areas (*pusainakkat*) or a hut for keeping chickens (*pugogoupat*) will be described as a part of the main zones. All these zones are diverse.

Despite the diversity of all those productive zones, there is a general pattern in which each of the zones consists of a series of dual components. First, there is the distinction between a residential environment occupied by humans and an exploited environment containing resources extracted by humans. Secondly,

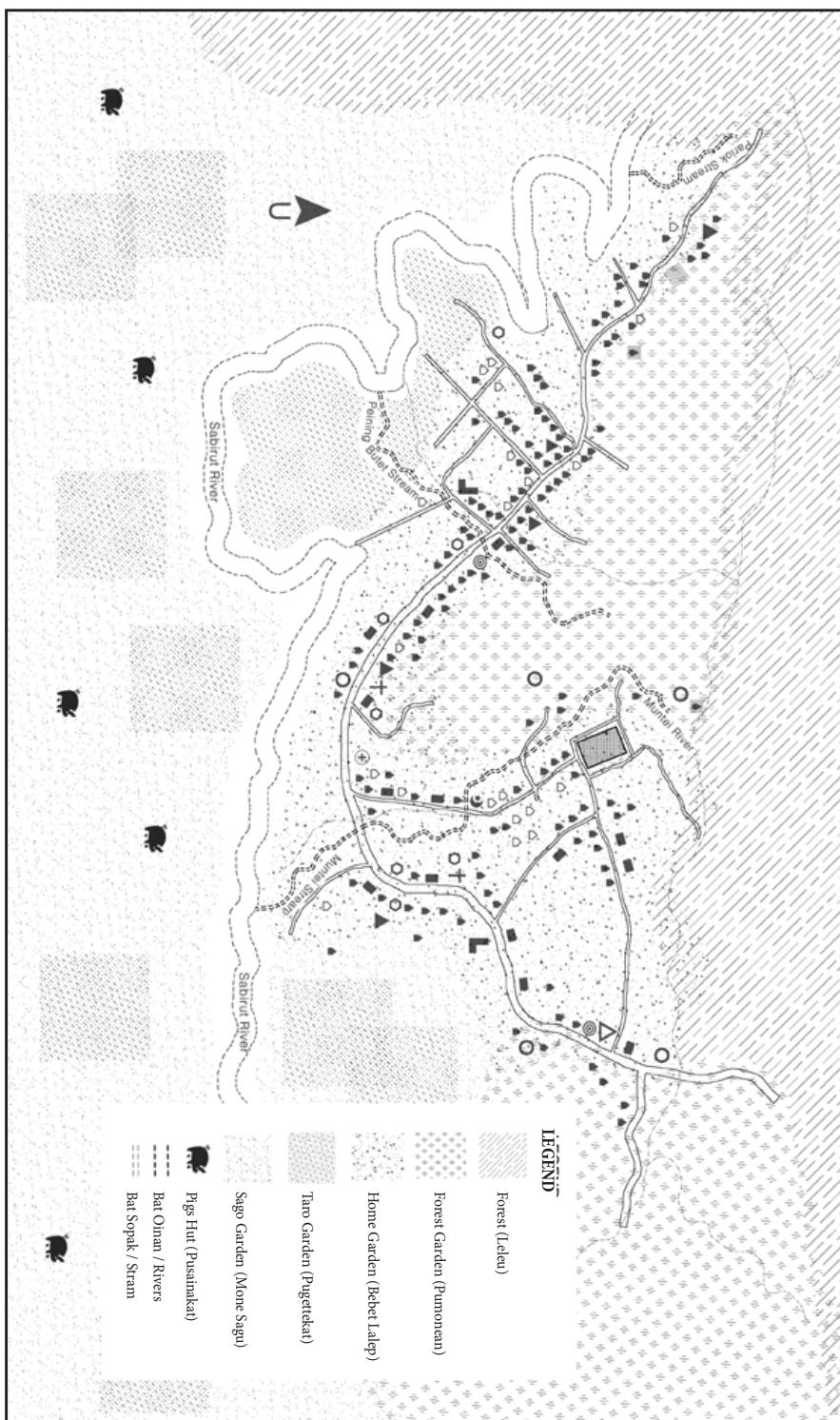


Figure 7. A schematic view of the manipulated ecosystems and productive zones in the vicinity of Muntei settlement (2015). The sea (koat) and small islets (nusa) are outside the settlement and not shown on the map.



Picture 11. The vast forest (*leleu*) in the north of Muntei, viewed from Muntei hills (2014)

there is the distinction of the intensive human-induced space and the diffuse human-induced spaces, which depend on the amount of human presence and activities. Third, there is the distinction that can be drawn from the nature of their exploitation, between domesticated and non-domesticated zones. These dual components are parallel but not identical. The parallel of the residential, the intensive man-induced environment, and the domesticated, points to the constant presence of humans, the presence of residential places, and the intensive human activities. As do the opposite categories. The exploited, non-domesticated, and diffuse man-induced environments are characterised by the domination of undomesticated and exploited resources, the absence of houses, and by having less time and human activities spent on them. It should be noted, however, that these dualities are just an analytical category. In reality, the divergence of each zone is not so neatly distinguished.

I will present a description of each of the productive zones, their main characteristics, and the edible resources in each of the zones to give a broader picture of the availability of and access to food.

Undomesticated Zones

Forest (Leleu)

In Mentawai terms, *leleu* refers to any extensive uncultivated land covered by uncultivated plants, either on solid ground (*posa*) in the hills or on the black-muddy land (*onaja*) in the lowland. Physically, *leleu* is characterised by the domination of giant trees and densely uncultivated plants and wild animals (Picture 11). External observers, who may be social scientists, foresters, or biologists, have translated the term of *leleu* as forest. Indeed, *leleu* has a certain structure, composed of different types of plants and occupied by various wild animals. Yet, the term *leleu* is neither a simple classification of physical appearances, nor the types of vegetation found there.

As an entity, *leleu* divulges its own peculiarities. The presence of giant trees and dense wild plants and animals has far-reaching ecological implications and cultural associations. *Leleu* is strongly associated with concrete and symbolic danger. There are venomous snakes, ferocious wild pigs, and thorny shrubs. Falling mouldy trees can kill someone at any time. *Leleu* has a powerful but ambiguous ambience. No human voices; no sound of people quarrelling or children crying. Against this background of silence, cicadas, hornbills, and primates, every now and then loud voices would suddenly emanate.

The ambiguous ambience and the danger of *leleu* evoke the world of invisible spirits. *Leleu* has been, and is still believed to be, the home of autochthonous forest spirits (*sikaleleu*). Wild plants and animals in the *leleu*, either giant trees or deer, are owned by these spirits. The ancestor spirits (*saukkui*) and unknown spirits (*sanitu*) are also believed to reside somewhere in and around the forest. *Sikaleleu* are the animals' and plants' masters and have their own 'culture' (Schefold 2002, 442). People must be careful before entering the *leleu* because every corner of it is full of spirits that can emanate *bajou* (power) and cause sickness. Those who become lost in the forest are brought by those spirits to their houses and longhouses. Certain locations in the *leleu* contain numerous natural objects with magical associations, such as waterfalls or small lakes, and these evoke mythical events, stories, and such like. It is viewed as an unsocialised and undomesticated space that is the opposite of a dwelling place (*barasi*) (Reeves 2001).

Conversely, and somewhat paradoxically, *leleu* provides good fortune and materials for human needs. Major game animals (wild pigs, deer, and primates) and *kailaba* (the pied hornbill) for decoration and ritual purposes are available in the *leleu*. It also provides trade items. *Calamus* rattan (*Calamus manan*) and agarwood (*Aquilaria malaccensis*), two of the most valuable products sold to the market, are extracted from the *leleu*. However, the most valuable product from *leleu* is timber for construction and for making canoes. Minor forest resources including bark for bow strings and loincloths, varieties of herbs, climbers and roots for dyes, poisons, and the manufacture and decoration of utensils and other objects have also been taken from the *leleu*. It is also valued as the source of a wide range of edible products. People come to the nearby forest to collect mushrooms, the shoots of wild palms, and wild fruit. The *leleu* is highly valued, primarily due to the fact that it is important for the creation of a new garden. A newly cleared forest has fertile and fresh soil that is suitable for a wide range of tubers and bananas.

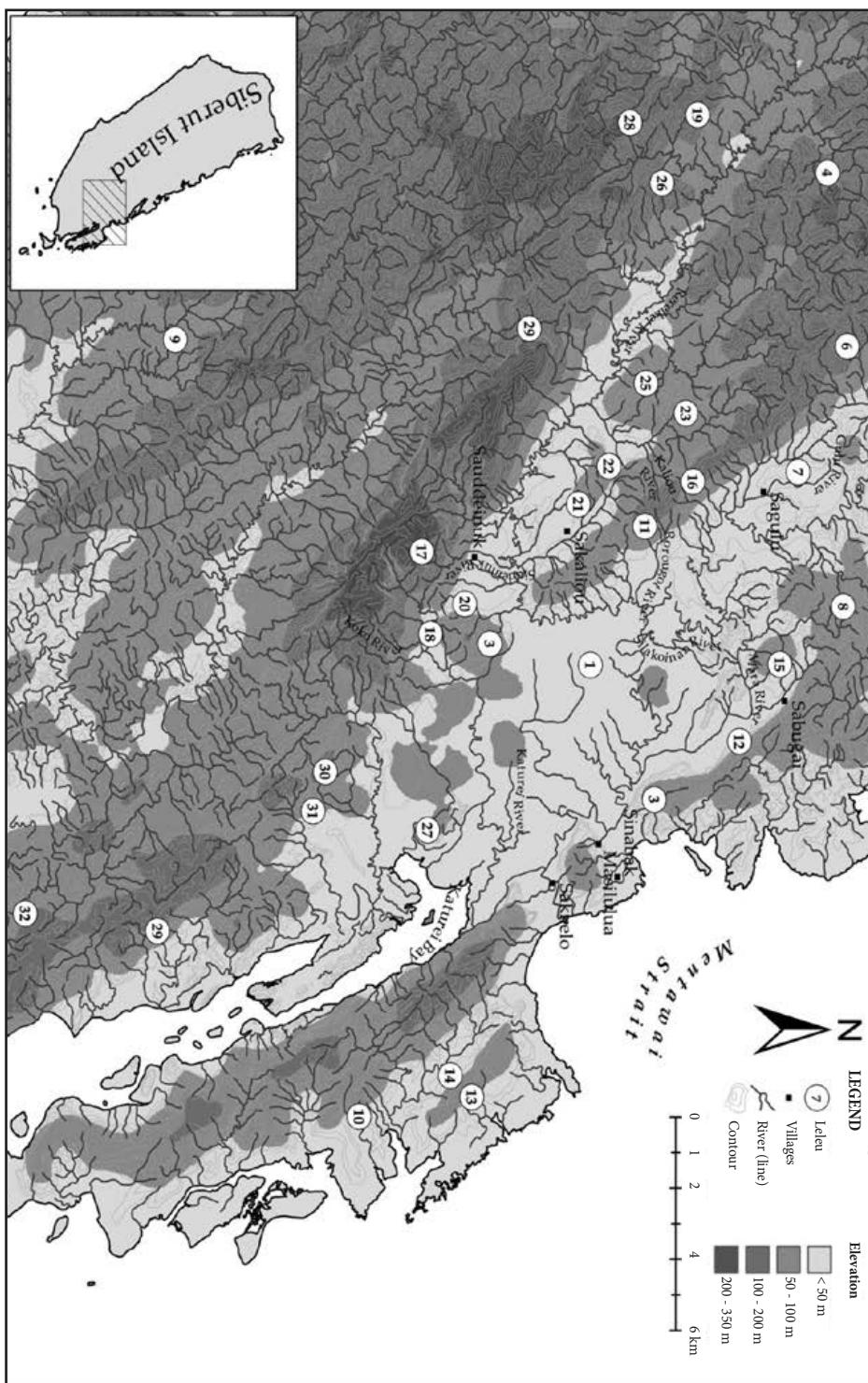
Generally, all the activities taking place in the *leleu* require a specific ritual asking for permission from the spirits. People always venture into a patch of *leleu* with diffidence, taking both practical and magical precautions. Cutting giant trees, collecting commercial rattan, and clearing trees for a new garden always start with a small offering (*panaki*). Gathering minor products (rattan, flowers) may not involve giving *panaki* to the spirits but an uttering to ask permission from the master of the wild plants is certainly necessary. In Muntei, the cultural value of *leleu* as 'hidden culture' has changed slightly. Most *leleu* near the settlement, especially in the hill areas, has been cleared and transformed into gardens. The giant trees, *calamus* rattan, and agarwood have entirely vanished, while minor products such rattan vines and wild fruit are difficult to obtain. However, the association between *leleu* and the world of spirits is not entirely displaced. People still speak of 'going to the forest' or 'returning from the forest' (*ka leleu*) when they visit their gardens.

The distribution of *leleu* in the vicinity of Muntei is illustrated in Figure 7 above. The observable forest is distributed across two areas: (a) the bulk of the hill forest on solid ground (*posa*), stretching from the Muntei's headwaters to the north. This forest tends to be along ridges and around steep knolls, unsuitable for growing staple food. This area was a principal source of timber for construction and converted into a mix of clove and fruit gardens, leading to its gradual thinning and denudation. (b) The lowland forest on swampy ground (*onaja*) stretching from the Mara River to the northwest of the settlement to the Sila Oinan River. *Onaja* forest has only limited plant species and is dominated by sago, *kakaddut* trees

Table 5. The Locations of Leleu Claimed and Owned by Uma Living in Muntei (2015)⁵

Uma/Clan	No. of Families	Locations of Leleu and Ancestral Land (Numbers refer to the places circled in Figure 8)
Sasabirut		
Sabajou	5	Leleu baja (Simatalu), Malagasat (Siberut Hulu) {1}
Sabulat	3	Teitei Muntei {3}, Matotonan{19}
Sagari	11	Mangorut {20}, Laksanan, Silakoinan Hulu {6}
Saguluw	1	Bat Gulu {7}
Salakoppak	16	Sirabai (6), Teitei Girisit {4}, Ligite, Soggunei (Saibi), Bat Lamao (Taileleu) {9}
Saleleggu	1	Leleubaja, Siroijat (Simatalu), Berisigep (Sigapokna), Erat Manyang (Katurei) {14}
Sarorougot	3	Obai {23}, Mabulu (Silaoinan) {16}
Saruruk	23	Bat Mara {12}, Rua Leleu {15}, Masingingit (Katurei) {10}
Satotottake	2	Maliorak {8}, Salaibea-Lupa (Silakoinan) {11}
Sauddeinuk	1	Bat Siuideinuk (Rokdok){17}
Sarereiket		
Samekmek	13	Bat Kokok (Rokdok) {18}, Hulu Matotonan {28}
Sailuluni	2	Bat Mangorut {20}, Bat Lamuri (Saibi)
Sakakaddut	8	Unidentified
Sakaliou	5	Bat Kaliou {21}, Teitei pagujet {25}, Bat Guruk Ojuk (23)
Sakukuret	13	Bat Timiang (Sagulubbek), Hulu Sirisurak (Saibi)
Salemurat	3	Bat Nambaliu (Ugai) {22}, Bat Nipa (Sagulubbek)
Samapopopou	3	Bat Katurei {27}, Matotonan {26}
Samatotonan	3	Tirik Matotonan (Matotonan) {19}
Satoleuru	1	Kaleak (Sagulubbek)
Siritoitet	5	Bat Toloulagok (29), Simangkat (Katurei) {31}
Uma/Family from Other Area		
Sabattilat	2	Simangkat {31}
Sakerebau	1	Bat Simaruei {32}, Mailimok (Katurei) {30}
Salabi	2	Tirik Saibi
Samalaibibi	1	Unidentified
Saleilei	1	Unidentified

Figure 8. The Locations of Leleu claimed and owned by Muntei residents (2015). Some leleu owned by Muntei people are located far away from the settlement, and are not covered in the map.



(*Alstonia* sp), and rattan vines. In recent times, this swampy forest is gradually being converted to cacao or coconut gardens.

Principally, *leleu* and the land it covers cannot be claimed by individuals but is the property of an *uma*. Each *uma* in Muntei has their own *leleu* but none of them are located around the settlement (Table 5 and Figure 8). For example, *uma* Saruruk possess *leleu* around the rivers of Mapinang and Sitetek in the east part of the Katurei Peninsula; Salakoppak's *leleu* is far away at the headwaters of the Silaoinan River; Samekmek claim an uncultivated area around the Koko River close to Rokdok Hamlet, and so on. Practically, any individual can collect material from the forest without a formal permit from the claimants, especially for subsistence needs and domestic purposes. It is somehow different when someone is going to make a forest garden or extract forest products for commercial purposes. In the latter case, permission must be obtained. Not everyone goes regularly to their own forest, rather they extract the necessary material from *leleu* nearby and visit their own forest occasionally, e.g. if there is a dispute over a boundary or an external development project is taking place on it.

Water Bodies (Bat-*oinan*)

*Bat-*oinan** refers to bodies of freshwater, including major rivers (*bat oinan*), small rivers or streams (*bat sopak*), and small lakes (*gineta*). *Bat-*oinan** are seen as undomesticated spaces as the water, fish, and other animals, stones (*laggai*), soil (*polak*), sand (*ngaik*) found there are not cultivated by humans. It is also believed that each body of water has its own spirits (*sikaoinan*). However, unlike taking something from *leleu*, most activities taking place in any body of water do not require a specific ritual asking for permission from the spirits. Travelling across a major river does not require precautions. The spirits in freshwater are not believed to be particularly malicious. Yet, people are careful with these spirits, who could become irate when someone keeps food for themselves or the community and does not share it. I will describe the relationship between illness and death and the failure to share food in Chapter 6.

There are two major rivers around the settlement, the Siberut River and the Mara River. Both are predominantly used for transportation. The Siberut River is the most important one (Picture 12); not only for Muntei residents, but the entire population of southeast Siberut as it is the only hub for upstream people to go to the coastal settlement and to bring forest products from the hinterland to the market. Once, the Mara River was only used by a handful of families, who had forest gardens and raised pigs. After the cacao fever in mid-2000, it gained in prominence and is now used by numerous light-inboard motors (*pompong*) and people carrying sacks of copra, cacao beans, and bananas. The Katurei River is another important *bat-*oinan** located outside the settlement. The river has its headwaters upstream but disengorges into Katurei Bay (see Figure 8). The Katurei River is tidal and has a huge saline estuary.

The two major rivers are not used exclusively for transportation, however. The Siberut River is a large storage area for sago piths. It provides an anaerobic environment to prevent sago pith and sago flour from rotting. Periodically, the Sabirut and Mara rivers supply freshwater animals. After heavy rainfall in the wet months (October-December or March-May), men fish for river eels (*lojo*) and local catfish (*tuik*) in the Siberut River and in the mouth of the Mara River. In the dry months, when the water level drops, both rivers are important fishing grounds. Various types of molluscs such as clams and mussels are taken by hand from the muddy ground. At the edges of the rivers, small fish and shrimps are collected with hand nets (*subba*) after the fishing area is stirred and becomes murky. In the driest month, a group of women may poison the Mara River upstream, using the root of *raggi* (*tuba, Derris elliptica*), in order to gather eels and catfish, but they will go to the mouth of the Katurei River as a group to collect crabs and clams. The combination of low sea-levels and a few weeks of drought make it possible to walk and collect those animals from the mud and from the skin of the mangrove trees (Picture 13).



Picture 12. The main river Sabirut, along Muntei settlement, is used mainly for transportation and storage of sago piths (2014)



Picture 13. Two women and a young man collect clams and mussels in the mangrove forest near Katurei Bay (2015)

Bat sopak provide sweet water and are used daily for bathing, washing clothes, or cleaning dishes. The settlement has three main *bat sopak* (the Muntei, Peining Butet and, Parioik), which are also used to delineate the hamlets. Muntei's stream is probably the most prominent of the three. It gives the settlement its name and provides the major source of sweet water, but the mouth of the stream is also used for tethering canoes or storing sago pith. The other two are smaller and used only as sources of sweet water. Other than fresh water, all three *bat sopak* provide plenty of animal food. After heavy rain, some men will put sago grubs on a hook made from bamboo to obtain *lojo* or *tuik* there. In the dry season, women go along the riverbed to its headwaters to gather shrimps, frogs, and small fish.

All water bodies are claimed by certain *uma*. Yet, their claims are merely sources of pride and recognition and do not limit everyone's access to them. Practically, everyone, even non-Mentawaians, can have access to and exploit either the major rivers or creeks around them for various purposes. This is perhaps related to the cultural importance of the *sikoinan*, which is associated with food sharing and the prohibition on eating alone, a subject discussed in Chapter 6.

The Sea (Koat)

The sea (*koat*) was once an alien environment to Muntei residents. This can be seen from the way people regulate access to it. The sea is an undomesticated zone; nobody owns it and it has never been claimed by a specific *uma*. Ocean water is inhabited by water spirits. It is associated with danger. Big waves, storms, and deep trenches are frightening.

In the last few decades, the sea has become an important productive zone, and, since the 1970s, some people have started to have a more intensive relationship with the sea as the demand for copra and the introduction of cloves persuaded them to build permanent huts on the small islets (*nusa*). Saruruk, Salelenggu, and Samapopopu have ancestral lands in the islets west of the Katurei Peninsula and have been fishing and hunting turtle around the islets since in the early 20th century. Uma Sabajou, Sagari, Sarorougot, and Salakoppak soon joined Saruruk and Salelenggu in making coconut gardens there. Along the way, people have improved their skills at using dugout canoes (*abak*) on the sea and taught themselves a variety of sea-fishing techniques. They also see the sea around mangroves or islets as a vast resource providing saltwater fish, mussels, clams, and especially important 'meat from the sea' (*iba-t-koat*), three species of turtles (*masururak*) and dugong (*sakkokok koat*).

The coastal areas have become part of the people's social life, especially for the mainly *Sasabirut* coconut growers. Exploiting animals, plants, and other objects in the sea is becoming a new habit. The changing relationship with the sea is reflected in their valuation of saltwater animals and sea fishing activities. Those who have gardens in the islets have regularly fished in the shallow coastal waters and coral reefs around their coconut gardens. However, the sea was, and still is foreign to most, if not all, the *Sarereiket* in Muntei.

Domesticated Zones

Residential Place (Barasi) and Home Garden (Bebet Lalep)

The residential place (*barasi*) is the most domesticated space. It is a place where humans spend most of their time doing major social and cultural activities (marriage, giving birth, mortuary rituals, and communal feasts). The *barasi* is marked by the presence of houses, longhouses, cleared roads, churches, schools, and other places used for social intercourse. In terms of edible resources, it has limited sources. Instead, the *barasi* is defined by the activities of processing and consuming food taken from other zones.

Small spaces between and around the houses in the *barasi* may be cultivated. This space is called *bebets*.



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Picture 14. A home garden (*bebet lalep*) in the margin of the settlement. The garden continues into the forest garden in the hill above (2014)

lalep, which literally means 'beside the house' but is best translated as 'home-garden' (Picture 14). Cassava and bananas are edible resources found in this area, along with sugar cane, limes, and spices such as ginger or lemon grass. Introduced vegetables such as chilies, snake beans, green beans, and eggplants are also added. Decorative plants used for religious ceremonies can also be found. Numerous chickens and ducks roam around. Recently, pigs have also been brought to home gardens and put in small cages.

There are two types of home gardens in Muntei. Home gardens in the centre of the settlement are rather small and clean. The gardens are regularly cleared and planted with various introduced grasses and vegetables. As this garden is seen frequently by passers-by, having a tidy garden generates social prestige and represents the diligent work of the owner. The other type of garden is located at the edge of the settlement. It is more spacious and only sporadically weeded. To some extent, this type of garden is unstructured and has no boundary with the forest gardens or hill forest and is filled with tubers and bananas, a number of coconut and fruits trees.

Fundamentally, the home garden is a gendered zone. Women are in charge of the cultivation, tending, and harvesting of the home garden, despite their husbands cultivating some herbs or medicinal plants for magical charms (*gaud*). The proximity of the home gardens allows women to have easy access to cultivate or weed them while watching their children or doing other domestic tasks.

Sago Gardens (Mone Sagu)

Sago gardens are seen by people as the most important domesticated zones. People say that all the sago palms around the settlement were planted, as they do not grow wild. The sago gardens require the periodic clearing and weeding of creepers and vines. The constant exploitation of the gardens requires the construction of a

temporary hut for shelter and sago processing platforms called *pusaguat*. Each household used to have its own *pasaguat* that could be shared with their siblings or parents. The *pusaguat* is normally erected either in the middle of dense sago stands, close to the little streams that flow in the centre of the gardens, or on the banks of a river.

Sago gardens are generally located on the swampy part of the forest where a steady supply of water is available to store the sago pith and process the sago flour. Muntei has been a site for sago gardens since it is a low-lying swampy area (*onaja*) located between the major rivers (Picture 15 and 16). By far the greatest proportion of gardens in Muntei is found in two vast areas of *onaja*. The first is in the nutrient rich area opposite the settlement. This area is surrounded by four *main rivers* (Siberut, Silaoinan, Sareriket, and Katurei) and called *kasilak*. Measured orthographically, this area is approximately 2,000 hectares, spread over the low-lying areas between Muntei and the upstream area of the Rokdok River. The second is a perennially damp area, stretched between the banks of the Mara River towards the Sabugai River up to the Sabugai hills in Central Siberut. Both areas receive nutrients and minerals from the surrounding hills and creeks.

The majority of sago gardens in the vicinity of Muntei are cultivated and owned by people from Maileppet, Puro, and families who now live on Sipora Island. Over centuries, the *onaja* around Muntei have been cultivated by hundreds of people for more than seven generations, creating a complex of sago gardens with diverse and overlapping rights. Parts of the sago gardens have been gradually bought, while new gardens were also made by people after the establishment of the settlement. This has led to the expansion and extension of sago stands. It is hard to differentiate which gardens are owned by Muntei and non-Muntei residents. The boundaries of sago ownership are also hard to demarcate because the stands are scattered and expand semi-domestically. Overlapping sago ownership has been acute since people regularly exchange both individual and collective sago stands for bride-wealth, compensation payments (*tulou*), and other social exchanges.

Sago gardens have provided various foodstuffs and non-edible resources for humans. Parts of the sago gardens in Muntei are used for raising pigs and chickens. Each pig owner borrows or buys a small parcel of land to build a small pig hut (*pusainakat*) or chicken hut (*pugogoupat*). The hut is usually a simple construction for storing sago pith (*sairappit*). It is also usually completed with a pen used to feed and catch the animals. Every morning or evening pigs and chickens come to the *pusainakkat* or *pugogoupat* when the owner beats a bamboo slit and lays down *sairappit*. For the rest of the time, the animals roam the secondary forest and the mud of the riverbank nearby. More importantly, the palms supply important proteins: sago grubs. Pith towards the top of the palm often yields a little starch. Their leaves are removed and the trunk is cleaved and placed upright in the mud. This section is sometimes covered with dry sago leaves to incubate the larvae of the *weevil* beetle. Within a few weeks, the inside of the pith is populated by fat, thumb-length grubs (*batra*) that make a welcome dish, especially for women and children. A mature sago stand can yield 12 kilograms of *batra* with very minimal human effort (see also Whitten and Whitten 1985, 35; Persoon 1992).

Furthermore, the ecology of sago gardens offers a suitable habitat for undomesticated animals. The structure of the sago gardens is not so different from the uncultivated forest. The tall and huge fronds of sago palm spill from the top of an 8 to 12 metre trunk. A grove of them scatter the light so that the air itself seems suffused with thick green vegetation of lianas and shrubs. Beneath the palms is a muddy marsh, shrubs, and under-growth tree species, wild vines, and creepers. Especially in the deep part of *mone sago*, where human intervention and presence is minimal, sago gardens are the playground of small mammals, feral pigs, and wild game. Apart from edible products, the leaves of the palm provide materials for roofs. The bark of the palm is skinned and cut into pieces and used for walls. Sometimes, the bark is laid on muddy paths to ease travelling. The bark is also a good source of firewood. It is dried under the sun and



Picture 15. A sago garden near the main river (1981)



Picture 16. A complex of sago and taro gardens in the vicinity of the settlement (2015)

cut into small pieces. The smooth spathe of the sago palm is made into baskets (*bolobo*) and sleeping mats (*bola*). Shaman in particular use it to make carrying cases (*baklu*).

Taro Gardens (*Pugettekat*)

Taro gardens produce taro (*gettek*), the second important staple. Most of the *pugettekat* are specifically located on the margins of the settlement. The other taro gardens are located inside the sago and forest gardens, forming part of the first cycle of forest cultivation (*tinungglu*). The latter types of *pugettekat* are normally fenced with living trees to keep the pigs out. Taro gardens are a gendered space and heavily domesticated. In some stages of cultivation, the men may help their wives to prepare a garden by digging the ground or erecting fences, but the whole cycle of planting, weeding, harvesting, and replanting is done by the women.

The greatest proportion of *pugettekat* in Muntei is located in an isolated pocket, created by the meandering of the Siberut River, in the east part of the settlement, between the houses and the river. This pocket receives regular floods that are rich in minerals and nutrients from the muddy rivers and creeks. The flat area on the riverbanks creates longer and more intense taro gardens than other places. The sandy and soft soil (*mangaik*) in the alluvial deposits on the river's banks has certain advantages over the muddy ground (*onaja*) in the forest and sago gardens. *Mangaik* soil, despite being subject to marginal erosion, retains the fertile and workable topsoil. These advantages allow people to have perennial *pugettekat*, producing a constant yield throughout the year.

Taro gardens are not entirely filled with varieties of taro (Pictures 17). The women add bananas, sugar cane, cassava, sweet potatoes, and other ornamental plants to the gardens. Not only do the garden supplant other sources of food, but flowers, bananas, and other ornamental plants make gardens look beautiful (*malainge*) but provide an additional supply of protein. Frogs, eels, and catfish are in abundance in the garden during the rainy season.



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Picture 17. A complex of taro gardens located between the residential place and the Sabirut River, filled with banana, cassava, sugar cane and ornamental plants (2014).

Forest Gardens (Mone)

The forest gardens are usually found at some distance from people's houses, filling the space between the *barasi* and *leleu*. The exuberant-looking forest gardens have attributes of both the domesticated *barasi* (clean, safe, and socialised) and the undomesticated *leleu* (untidy, spontaneous growth, wild, dangerous, and uncleared). This zone is dominated by a combination of fruit trees, wild plants, and semi-cultivated vegetation (bamboo and medicinal plants). The presence of species such as bamboo, sago, coconuts, and fruit trees is a sign of cultivation activities. However, *pumonean* retain the character of the forest—wild trees grow spontaneously and wild game can be found. *Pumonean* can be said to be intermediate spaces where the clear boundaries of the domesticated and non-domesticated resources are difficult to see.

Essentially, the garden is for food resources. The emergence of coconuts and other native species (patchouli and calamus rattan) as commodities sold on the market and the introduction of foreign cash crops, notably cloves and cacao, have complicated the *tinungglu-mone* cycle and altered the importance of gardening for providing food. The introduction of cash crops in the *tinungglu-mone* cycle means the forest gardens have undergone the transformation from a place for growing diverse plants into gardens where certain specific cash crops eventually dominate.

There are at least three types of forest gardens owned by Muntei residents: first is the traditional type of *pumonean*, described in Chapter 2. This type has conserved the whole cycle of *tinungglu-mone*. The cultivation of tubers and bananas in the *tinungglu* cycle remains intact and the domination of fruit trees in the *mone* cycle persists. Patchouli may be planted in *tinungglu*. Yet, as the second yield has little result, the insertion of the plant does not fundamentally alter the cultivation cycle. Despite many of the cultivated plants being for subsistence purposes, this type of garden also provides a huge opportunity to generate cash, especially for those who have introduced animals to the gardens. The local and regional demand for pigs, around and beyond Muntei, is steadily increasing, as is the price. This opens an opportunity for pig farmers to occupy a niche in the emerging market as suppliers of living pigs and pork. The majority of *Sarereiket*, especially *uma* Sakukuret, Sakaliou, and Sailuluni maintain this type of forest cultivation. Satototake and Samekmek families also maintain this type of garden in the old settlement of Siberut Hulu. This type of garden is generally located around an old settlement and closer to the forest in the hinterland.

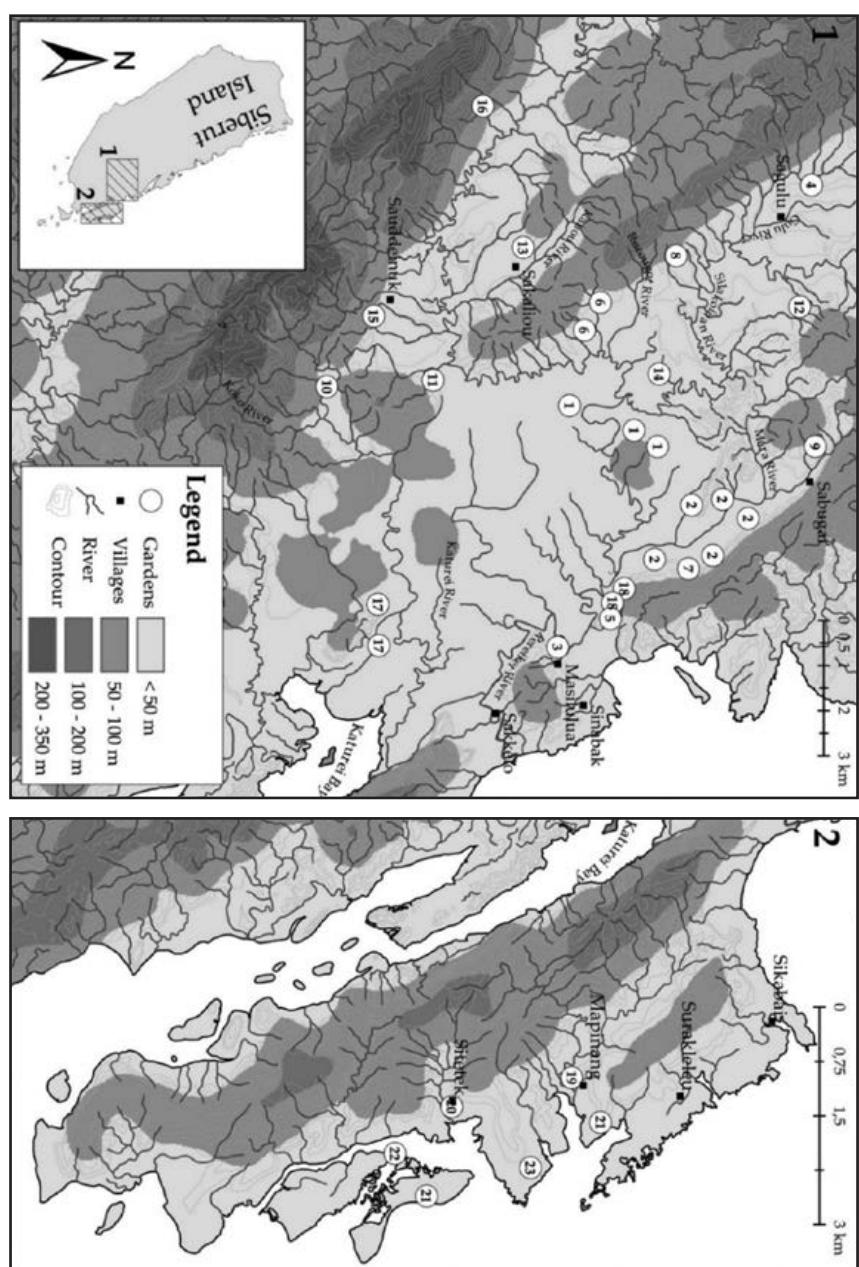
The second type of garden consists of a combination of fruit trees and clove trees. This type exclusively occupies a narrow but long hill at the headwaters of the Muntei's stream. This type was opened after people moved to the settlement. These gardens were not started using the *tinunggulu* cycle as the hills around Muntei were sparsely cultivated. Durian trees and jackfruit were already there. People just cleared the undergrowth there and cut down the brush. Tubers and sago were not cultivated as they are not suited to solid ground (*posa*). Bananas and cassava were sparsely planted to loosen the solid soil, alongside clove seeds. When the clove trees reach about the height of a human and are believed to be strong enough to survive, jackfruit, durian, *siamung*, and *bairabit* are sparsely planted. These fruits trees are rarely planted in equal proportions, even if they were originally planted as such. The best fruits trees are tended while the others are left to fend for themselves. In a relatively short time, these gardens become dominated by cloves and people call them *kebun cengkeh* or *cangkikhku* (my clove).

The third type of forest garden is exclusively created on the small islets (*nusa*) of the Katurei Peninsula. Initially, this type of garden followed the *tinungglu-mone* cycle. Yet, the *tinungglu* is shorter and few food plants are cultivated, while the *mone* stage is dominated by monocrop commercial plants, either coconuts or cloves. Sandy, dry soils and the lack of humidity make it impossible for taro and sago to propagate. Bananas, sugar cane, and some vegetables might be planted in moist soil near the small creeks inside the islets at the same time as coconuts and cloves are cultivated. A permanent hut is constructed. In less than two years, the coconut and clove trees become dominant and provide shade that prevents food plants

Table 6. The Locations of Forest Gardens (Pumonean) Cultivated and Owned by Muntei Residents (2015)

Uma/Clan	Families	Locations, Localities (Number of Gardens) in Mata			Total
		Traditional Type	Hill Garden (Number)	Coconut Garden (Number)	
Sasabirut					
Sabajou	5	Sabirut Hulu (3), Bat Mara (2)	Muntei (4), Mapinang (1)	Masilok (2), Sitetek (3)	15
Sabulat	3	Siberut Hulu (2), Bat Mara (2)	Muntei (1)	-	5
Sagari	11	Siberut Hulu(7), Bat Mara (4), Masilulua (2)	Muntei (13), Sitetek (4)	Masilok (2), Mapinang (1)	33
Saguluw	1	Bat Gulu (1)	-	Parakbatu (1)	2
Salakoppak	16	Siberut Hulu (11), Masilulua (3)	Muntei (11), Bubu (3)	Masilok (5), Parakbatu 3)	36
Saleleggu	1	Bat Mara (1)	Muntei (1)	Parakbatu (1) Masilok(1)	4
Sarorougot	3	Bat Mara (3), Rorougot (1)	Muntei (3),	Mapinang(1)	8
Saruruk	23	Bat Mara (3), Tingoik-ngoik (7)	Muntei (13), Surakleleu (6), Mapinang (3)	Erat Manyang (5) Parakbatu (9)	43
Satotottake	2	Maliorak (1), Lupa (1) Simabugei (2)	Muntei (2)	Mapinang (1)	7
Sauddeinuk	1	Siberut Hulu (1); Sauddeinuk (1)	Muntei (1)	Sitetek (1)	3
Sarereiket					
Samekmek	13	Bat Kokok (15), Sabirut Hulu (7); Bat Mara (4)	Muntei (9)	Masilok (4)	33
Sailuluni	2	Bat Mangorut (4) Bat Mara (2)	Muntei (5)	-	11
Sakakaddut	8	Siberut Hulu (2) Silakoinan (9)	Muntei (5)	-	16
Sakaliou	5	Bat Kaliou (15) Bat Mara (2), Silakoinan (4)	-	-	21
Sakukuret	13	Bat Mara (7) Siberut Hulu (9)	Muntei (15)	-	31
Salemurat	3	Bat Muntei (2), Masilulua (1)	Muntei (1)	Mapinang (1)	5
Samapopopou	3	Siberut Hulu (3)	Muntei (2)	Sitetek (2)	7
Samatotonan	3	Matotonan (4), Masilulua (1)	-	-	5
Satoleuru	1	Bat Mara (1), Matotonan 1)	-	-	2
Siritoitet	5	Madobak (4) Bat Mara (3)	Bubu (3)	-	10
Uma/Families from Other Area					
Sabattilat	2	-	-	-	-
Sakerebau	1	Katurei (2)	Malilimok (1)	Malilimok (1)	4
Salabi	2	Bat Mara (2)	Saibi (2)	-	4
Samalaibibi	1	Ugai (!)	-	-	1
		128			306

Figure 9. The Locations of Mature Gardens (mone) Consisting of Fruit Trees and Commercial Crops Owned by Muntei Residents (2015).



Numbers in circles refer to the specific localities in which the gardens are established: (1) Sabirut Hul; (2) Bat Maru; (3) Masiluua; (4) Bat Gulu; (5) Bat Muntei; (6) Rorogot; (7) Tingoik-ngoik; (8) Lupa; (9) Simabugeit; (10) Bat Kokor; (11) Bat Mangorut; (12) Maiorak; (13) Bat Kaliorak; (14) Silakoman; (15) Saudeniuk; (16) Madobak; (17) Katurei; (18) Muntei; (19) Mapinang; (20) Sitetek; (21) Masilok; Parak Batu (22); (23) Erat Manyang.

from growing. In the next few years, pigs and chickens are brought to the garden. The matured coconut gardens, especially in larger areas, are strikingly effective for keeping pigs and chickens, despite the owner having to transport sago pith for the animals. Lexically, the term of *mone* or *pumonean* is still applied to the collection of coconut and clove trees, even if no fruit trees are found there. The presence of pigs generates a sense that a garden has retained the character of *pumonean*. While it is still seen as a forest garden, it is one that has been associated with specific crops and consequently, lost the character of the forest. The Indonesian term *kebun* (grove) has gradually been incorporated into the lexicon.

The actual distribution and the locations of different types of gardens owned by Muntei residents are shown in Table 6 and Figure 9. The table indicates that a family in each of *uma* has more than one garden. Roughly, each family has three different gardens in different locations. The locations of various type of gardens in Figure 9 indicate the approximate location of old gardens created by past generations and also point to the influence of cash crops. Most coconut gardens are located in the small islets while traditional gardens are mainly in the old settlement in Siberut Hulu or around Mara River and ancestral land. In general, the table and the figure show that people, regardless of their Sasabirut-Sarereiket origin, and their status as the pioneer and latecomers, have various type of gardens for their livelihood.

Small Islets (Nusa, Pulau)

The term *nusa* is specifically associated with the small islets scattered off the east coast of Siberut. Despite it referring mainly to the islets that have been domesticated and converted into coconut and clove groves, the term *nusa* also encompasses mangrove forests, coral reefs, beaches, and tidal flats. Prior to the demand for copra around 1940, the residents of Muntei did not really pay attention to the *nusa* and their surrounding ecosystem. Beaches and dry land in the islets were initially used only for temporary shelter when people were in the coastal areas fishing and hunting turtles (*masusurak*) and sea cows (*sakokok koat*). It is only with the incentive to obtain trade goods and acquire cash after selling cash crops that *nusa* have begun to gain importance. This has undoubtedly been accompanied by the demand for and the increasing valuation of cultivation sites around them.

Today, *nusa* are mainly used for coconut (Picture 18) and clove gardens. The beaches and islets have been targeted and bought by foreign investors for surfing camps, resorts, and other infrastructure for the surfing industry. For Muntei's residents, the growing importance of *nusa* corresponds to their changing perceptions of and relations with the sea and the food resources in it. Having gardens in *nusa* allowed the people to learn various fishing skills. This also added variety to their diets.

The *nusa* cultivated and exploited by the residents of Muntei are not administratively part of Muntei's territory, but fall under the control of Katurei Village. Saruruk and Samapoupou *uma* have long claimed ancestral land in the east part of the Katurei Peninsula. Other groups, such as the Salelenggu, Sagari, Sarorougut, and Salakoppak, have either bought or inherited a few plots of land from their ancestors. A few of the Sarereiket, such as members of the Samekmek, recently joined *Sasabirut* to obtain the rights to cultivate the islets and adjacent areas after purchasing them from the claimant of the land. Members of those *uma* have cultivated *nusa* for coconut gardens in the islands of Masilok, Berekei, and Parakbatu and a number of hills opposite these islands (Sitektek, Mapinang) are used for clove gardens (Figure 9).

Unlike the sea, access and rights to the *nusa* have customarily been regulated. Except for land permanently inundated by salt water, all parts of the *nusa* belong to certain *uma* or individuals. Mangrove trees, sandy beaches, muddy tidal land, and small streams running inside the islets have been assigned, owned, and, to some extent, semi-cultivated. However, most of the uncultivated areas on and in the *nusa* are basically seen as 'open resources'. Taking giant mangrove trees or sand for commercial purposes may require formal permission and a compensation payment (*pulajuk*) for the claimants, but this is not necessary for taking edible resources, mainly crabs, clams, and mussels.



Picture 18. A family from *uma* Salakkopak processes coconut into dried copra on a small islet (*nusa*) in Majene, Katurei (2018)



Picture 19. A man processes sago on a platform (*pusaguat*) (2012)

3.2 The Availability of and Access to Plant Food (*Kat*)⁶

People consume animal flesh or parts of plants collected from both the domesticated and non-domesticated zones described above. They divide all types of food into two general categories: *kat* and *iba*. The first refers to all the edible items obtained from plants, including roots, flowers, their starch, leaves, and fruit. It includes domesticated and non-domesticated plants. The second refers to all the edible items obtained from animals, including their fat.

Sago

Sago is culturally the most important staple and ecologically the most abundantly available and reliable staple. Sago flour is eaten almost daily. The most common method of cooking sago is by putting sago flour in bamboo and then roasting the bamboo on a fire. This is called sago *siokbuk*. Another method is by wrapping sago flour in sago leaves and roasting it directly on the fire. Once the starch is cooked, the sago looks like a bread stick (*kapurut*). Another popular method is to cook sago flour on a hot pan with grated coconut or sugar (*sigajak*). Leftover *kapurut* or *siokbuk* can also be recooked by soaking it overnight. It is then mashed and stuffed into bamboo stems and roasted on a fire.

All the sago flour in Muntei is extracted from two species of sago: *Metroxylon sagu* and *Metroxylon Rumphii*. Typically, *Metroxylon sagu* is found in places where the soil is moist while *Metroxylon Rumphii* is found closer to uncultivated areas, such as forests and usually occupies a relatively higher altitude. Despite the flour of *Metroxylon rumphii* being sweeter and crunchier when it is roasted, processing sago in the hills requires more energy and is more time consuming as a flow of water is not always reliable. Both types of sago can be found in any of the sago gardens along major rivers and any wet areas closer to the settlements.

Sago palms take many years to mature. Sago cultivation, however, is not really labour intensive, compared to the cultivation of grains especially rice (Flach 1985, Persoon 1992). Young trees produce permanent suckers, and thus a mature sago stand is always ready to reproduce naturally. Suckers are selected from healthy palms and the root stocks are transferred to new fields, typically on riverbanks. Once the plant matures, it can flourish on the riverbank without human interference. At about ten years old, the palm accumulates starch in the trunk and starts to redirect nutrients to the flowers and fruit. Before this process starts, or has proceeded too far, people cut the palm and take the starch.

A fully grown sago tree produces about a ten metres length of processable pith. After a palm has been felled, it is cleaned of its spines and divided up into pieces of 1 to 1.5 metre length. The processed piths are shaved away and brought to *pusaguat* (Picture 19). The tough outer rind (the bark) is stripped with a long, lever-like palm wood tool to expose the pith. To free the starch, a machete might be used for pulverising the material and breaking it into small pieces, but an L-shaped wooden sago hammer (*kukuilu*) is preferred, as it provides a forward blow as the tool is struck down upon the pith. As pounding proceeds, the trunk is hollowed out, and people sit within it as the work continues. These tasks are usually done by men and youths. Crumbled pith from the trunk is then washed, rinsed, and filtered several times in *pusaguat*. Grated starch is placed on the sago sieve (*karuk*), a plank frame around a floor made of fibre from the bottom leaves of sugar palms or coconut palms. Water from the stream below *pusaguat* is poured into the *karuk*. Normally, people use their feet to rinse out the starch. The thick white liquid drips through the sieve and is channelled through two wooden gutters, usually made from unused canoes. The fine sago starch settles in the lower gutter. Starch-sediment is then collected and stored in small 20 kilograms' bucket-sized containers (*tappri*) made out of sago leaves.

Sago is a very efficient source of food. One sago pith produces roughly one or two *tappri*, depending on the quality of the tree. One mature sago tree produces 15 to 20 *tappri* of sago flour, which is about 300 to 400

uma also had more opportunities to involve themselves in social exchanges with others around Muntei who had sago on their land. Only three Mentawaiian families have no sago garden. These are families and other members of their *uma* living outside the settlement: Samalaibibi (1 *lelep*); Saleilei (1 family); and Sakakaddut (2 families).

There has been a decreasing commitment to processing sago in the traditional way. Among the 128 Mentawaiian families belonging to 26 *uma* in Muntei, only nine of them have *pusaguat* and regularly process their own sago. Three out of the nine are families who do not have sago gardens around the settlement. The families have been granted permits, either by an owner of sago who happens to be a brother-in-law, or close friend (*siripok*), to exploit and extract sago in *Kasilak*. In return, the owners receive half of the sago flour produced. The decline in the traditional processing of sago is likewise based on the time spent on cash crops and the availability of sago flour in the market. The involvement in cash crops has encouraged people to stop their sago processing and use the cash from selling more valuable crops to buy both sago and rice from the local market.

The availability of sago in the market is caused by a minor technological innovation. Since the mid 2000s, new grater machines have been introduced to Muntei and its surrounds, making the process of extracting sago pith easier and quicker. The grater machines have only replaced *kukuilu* and *tegle* and the human labour spent on these actions, as cutting and cleaning the sago trunks, pulverising and then rinsing the sago flour are still carried out in the traditional way. The introduction of the new machines and the abundance of good quality sago palms have created opportunities for a number of people to start new ventures processing and selling sago flour. All the grating-machines owners in and around Muntei process sago from other people's trees; they are fully dependent on the willingness of the trees owners to sell their trees to them. With the surplus, the owners of the sago are more than happy to let the owners of the machines cut and collect sago from their gardens and transport the pith to their sago processing platforms. The sago providers now provide a constant supply of sago flour in Muntei and the adjacent settlements. Each kilogram of sago is sold in the local market for IDR 2,000.⁷ While the grating machines make sago processing more effective, they also shifted sago processing from the labour domain of men to the labour domain of women. With the machine, sago processing is now not always processed in *pusaguat*. Women mash the sago starch with their hands in their home gardens. The modification in the gender related labour division has placed an extra burden on some women.

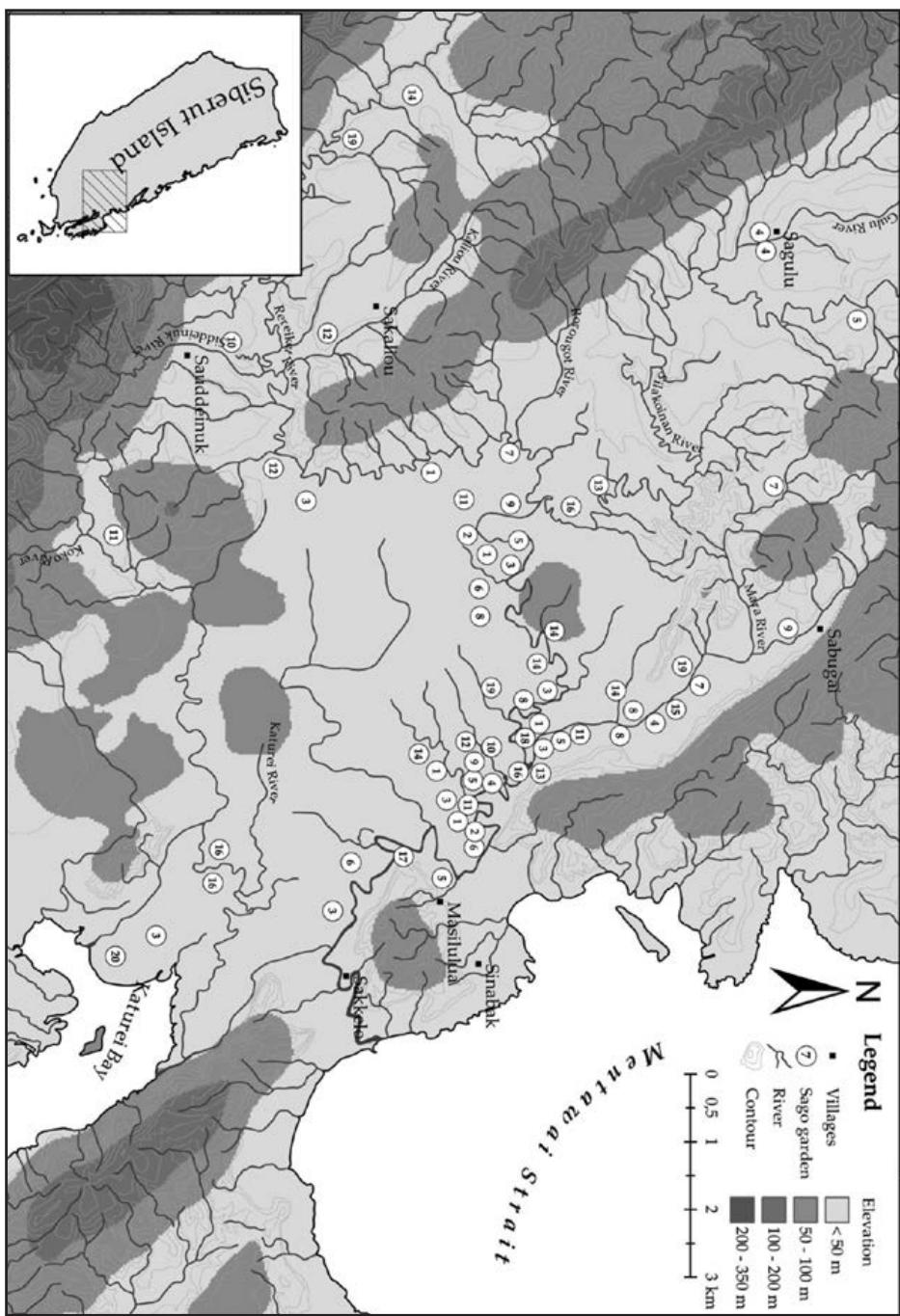
The decline in the desire to process sago has been exacerbated by the arrival of cacao. When the price of cacao was at its peak in 2006-2007 (about IDR 28,000/kilogram),⁸ there was a rush to replace sago with cacao. By late 2009, most of the sago gardens around the settlement and on the sides of the road were replaced by cacao. For maximum yields, cacao requires an open space, larger than is usual for a forest garden. The conversion of swampy areas to cacao is done by clearing all the vegetation and draining. Cacao has ecologically converted diverse sago gardens; during the early stages of cultivation, cacao might be integrated with banana, taro, or pineapple. However, for most of its lifecycle, cacao requires monoculture. People do not seem particularly concerned about the depletion of sago, as apparently there has always been a surplus of sago palms. The abundance of the palms gives a great sense of food security, despite them having little economic value. They say that they can buy sago with cash from other crops. It seems that they prefer to cultivate cacao and spend the money to obtain food (rice) from selling it.

The majority of people now have little interest in processing their own sago and have tried to convert their gardens into cacao, but it is too soon to say that they have entirely abandoned the production and consumption of sago. The decline of traditional sago processing cannot be seen as a significant indication of a disruptive transformation in the importance of sago. Muntei's residents, especially the elders, still bring and transport young sago sprouts whenever they leave the settlement and plant them in any empty

Table 7. The Location and Number of Sago Gardens (Mone Sagu) Owned and Claimed by Muntei Residents (2015)

No. of Clan	Uma/Clan	No. of Factions*	No. of Families	Locations, Localities/Hamlet (Number of Gardens)	Total (in Mata)
<i>Sasabirut</i>					
1	Sabajou	-	5	Kasilak (11) Malagasat (Siberut Hulu) 13 Bat Mara (5)	29
2	Sabulat	-	3	Bat Pariok (1), Siberut Hulu (3) Kasilak (5);	9
3	Sagari	3	11	Katurei (4), Malilimok (3) Mangorut (7) Siberut Hulu (7) Bat Mara (4) Kasilak (5) Puro (2)	32
4	Saguluw	-	1	Gulu River (3) Bat Mara (1) Kasilak (3)	7
5	Salakoppak	2	16	Kasilak (17) Siberut Hulu (21) Masilulua (5) Bat Mara (7) Silakoinan (5)	52
6	Saleleggu	-	1	Siberut Hulu (2) Katurei (2) Puro (2) Kasilak (1)	7
7	Sarorougot	-	3	Rorougot (5) Bat Mara (3) Kasilak (3) Mabulu (Silaoinan) (3)	14
8	Saruruk	2	23	Tingoik-ngoik (7) Bat Mara (7) Siberut Hulu (11) Kasilak (4) Mapinang (8)	37
9	Satotottake	-	2	Maliorak (4) Lupa (4) Siberut hulu (5) Kasilak (3)	16
10	Sauddeinuk	-	1	Kasilak (2) Rokdok (3)	2
<i>Sarereiket</i>					
11	Samekmek	-	13	Bat Kokok (11) Kasilak (5) Siberut Hulu (16) Bat Mara (4) Samekmek (12)	48
12	Sailuluni	-	2	Bat Mangorut (7) Kasilak (5)	12
13	Sakakaddut	-	8	Kasilak (3) Siberut Hulu (2)	5
14	Sakaliou	-	5	Bat Kaliou (Rokdok) (15) Bat Mara (2) Silakoinan (7)	24
15	Sakukuret	3	13	Bat Mara (7) Bat Sirikdik (5): Madobak (7) Kasilak (7) Siberut Hulu (12)	38
16	Salemurat	2	3	Bat Nambaliu (Ugai) (1) Bat Mara (1)	2
17	Samapopopou	-	3	Bat Katurei (3) Kasilak (5) Siberut Hulu (3)	8
18	Samatotonan	-	3	Matotonan (7) Puro (2)	9
19	Satoleuru	-	1	Matotonan (4) Bat Mara (1) Kasilak (1)	6
20	Siritoitet	2	5	Madobak (6) Kasilak (1) Bat Mara (1)	9
<i>Uma/Families from Other Area</i>					
21	Sabattilat	2		Simangkat (3)	3
22	Sakerebau	1		Katurei (6)	6
23	Salabi	2		Bat Mara (1) Kasilak (1)	2
24	Samalaibibi	1			-
25	Saleilei	1			-
128				377	

Figure 10. The Locations of Sago Gardens Owned and Claimed by Muntei Residents (2015).



The numbers in circles refer to locations of the *uma/clan's* garden stated in the first column of Table 7.

kilograms of sago starch. This number is lower than the calculations made by Whitten and Whitten (1985, 34-35), who pointed out that a mature sago in Central Siberut produces 400 to 600 kilograms. In Muntei, one *tappri* can last a family consisting of two adults and four children for roughly three weeks. Converting the whole tree to flour requires nine days (23.6 hours) worth of work from one person (Whitten and Whitten 1985, 33-34; see also Persoon 1992). Thus, just nine days of work translates into enough starch to feed a family for four months. In general, sago gardens are enormously abundant. A *mata* sago can feed a family for about 19 years. Therefore, there has always been an abundance of sago palms.

Muntei residents count their living sago in *mata*. This literally means 'eyes', but is best translated as 'growing area' (see Schefold 2017, 54). A *mata* is between approximately a quarter of a hectare to a half of a hectare in size and consists of about 25 to 50 mature trees and several hundred young sprouts. A sago *mata* belongs to the family who planted or bought it. The individual rights to sago gardens might also be obtained through a purchase, a gift, a compensation, or part of the payment of bride-price. This individualisation of sago gardens-holding is, however, a virtual claim. Although these are regarded as a perfectly legitimate and separate form of ownership, the passage of time, particularly since it takes more than ten years for a sago palm to fully mature and be ready for harvesting, tends to transform individual rights into the undifferentiated rights of various people.

Flexibility in people's access to sago is associated with, firstly, the nature of sago as the main staple. Sago is consumed at both daily meals and ritual feasts and is planted in communal land and processed by different members of the *uma*. There is a belief that sago must be accessible to all members of the group. The other reason corresponds with the flexibility of the social relations within an *uma*. The group's social relations have a pattern of generalised reciprocity associated with a domestic mode of production and subsistence ethos. While sago gardens are always individually claimed, the stand is also part of the collective interests, borrowed, exchanged, and consumed as needed by any member of the *uma*. It is hard to distinguish family sago gardens and *uma* sago gardens. While a single sago palm was initially planted by a single ancestor, over centuries the stand has grown and expanded and might be claimed by two or three different descendants. In general, sago gardens are usually referred to with reference to the specific group to whom they belong: regardless of whoever the specific person that planted it was.

The actual distribution and ownership patterns of sago—either owned by a family, or *uma*—are shown in Table 7 and Figure 10. The table shows that each family in each *uma* has more than one sago garden. The main location of Muntei residents' sago gardens is the opposite settlement (*kasilak*). This particular place has been cultivated by a hundred people from around Maileppet, Katurei, and Rereiket. Initially, Muntei people obtained sago gardens from Saurei *uma* living in Maileppet and Sakerengan Lelegu *uma* living in Sakelo. Other families had already obtained gardens through various methods of social exchange prior to settling in Muntei. At the same time the families kept their sago possessions in their old settlements and other localities. Therefore, the sago gardens owned by Muntei residents are not all situated around Muntei. Some families have sago in other people's ancestral lands far away, while others have sago in neighbouring settlements. In general, the location of sago gardens indicates, firstly, the approximate location of the residences of earlier generations, making it possible (at least to a limited extent) to trace changes to the location of every *uma* over a period of time; and secondly, very complicated social exchanges between individuals and *uma*, both in the past and more recent times.

The household survey of Muntei shows that each family has at least three *mata* of sago around and beyond the settlement. The size of each group corresponds to the number of sago gardens. The larger *uma* with a higher number of households tend to have more sago gardens. This is probably due to the fact that the larger *uma* are originally from the Sabirut area, where their ancestors had already cultivated sago. The

spots available in their *onaja* or forest gardens. They say that they still need sago to pay a bride-price, compensation for social exchanges, and anticipate the need for it in the future.

Taro (Gettek)

Taro (*Colocasia esculenta*), locally called *gettek*, is the main ingredient of *subbet*, mashed taro and banana balls that are rolled in grated coconut. *Subbet* is a must-have food during community rituals. For regular meals, taro is just boiled in a pan or put in bamboo containers and roasted on a fire. Fried taro is sometimes served for breakfast. Mashed taro is used as baby food. The young taro leaves of the variety named *lot-lot* are used as a vegetable dish and as a stimulant, referred to as Mentawaiian tobacco (*ubek*), prior to the arrival of imported tobacco.

There are at least 24 local varieties of taro ethnically classified according to their texture, shape, colour, and the size of the stalk and leaves. Generally, taro varieties are divided into two broader types: 'tender' (*magabru*) and 'sticky' or (*maekket*), reflecting the received opinion of the cooked texture of taro and the itchy-effect of the tubers. 'Sticky' are planted towards the outside of a garden, as they are the first ones that a pest or a thief may encounter. 'Tender' taro plants may find themselves planted there but are mostly put inside the garden. People say a mix of both types is necessary to prolong the life of the garden and to regulate consumption. Planting only 'tender' taros will encourage people to eat them while harvesting them, leaving little for future cultivation, whereas an entire crop of sticky taros would be unenticing; either way, the garden would not provide tasty taros for very long.

Taro has a rich symbolic and cultural significance (Picture 20). This aroid plays a significant role in women's social lives. A girl first learns to cultivate taro soon after she starts to accompany her mother in the garden. However, the real taro cultivation begins after a woman marries. Initially, a newly married woman may receive her own garden from both sets of parents or as part of the bride-price paid by the groom's family. Eventually, she is expected to cultivate her own taro to feed her family. Married couples aim to increase their taro stock, not only to keep pace with a growing family, but also to be able to give half a garden upon the marriage of each of their own children.

Women often start to plant taro in the rainy months. Yet, the cultivation is not principally determined by the season but by the concerns of the individual cultivator's need. The prepared garden is dug out with the help of a machete, to a depth of a little less than 50 centimetres. The dug-out soil is piled up in the area between the fields. Taro plants collected from older fields serve as seedlings. The leaves of the taro plants are cut off from the tuber. The upper part of the tuber to base of the stalk is planted with the help of a wooden stick. Stems are planted randomly without any formal structure, with an average distance of one *ladou* (a hand's span, about 20 cm) between each stem. Older women do an offering to appease the spirits inhabiting the land prior to the establishment of a new garden and organise a ritual called *punen lia gette* to protect their garden and its harvest. However, I never witnessed such offering.

A taro garden requires intensive attention once established. The cultivation of taro involves continuous small-scale harvesting and replanting. A taro garden is rarely fallow. Women have to visit their taro gardens regularly, to tend to them, to weed them of grass and shrubs, dig up tubers, and so on. Frequently, some stalks are planted before the tubers are harvested. One replanted stalk regenerates one new corm, despite additional smaller shoots occasionally sprouting from the tuber's sides. The regenerative stalk, defoliated and severed from the corm, must be replanted within two or three days, otherwise it will rot. Taro is ready to be harvested in four to eight months. The precise timing of the harvest is determined by the garden's owner, usually with reference to two factors: (a) the maturity of the taro; (b) the demand for ritual feasts.

The availability of gley soils with relatively high fertility contributes to the wide distribution of taro gardens. *Pugettekat* in Muntei is concentrated in a small waterlogged area on an isolated peninsula

between *barasi* and the Siberut River called *Toinong Muntei* (Figure 5). The area is relatively narrow (only 6.7 hectares in total) and has been divided among 63 different households. The entire *Toinong Muntei* was once exclusively claimed by *uma* Samalagasat, a faction of *uma* Sabajou who once lived around Muntei but then moved to North and South Pagai Islands to the south of Siberut. Muntei's early residents purchased the land after Sabajou men asked their relatives to sell the land. This explains why Sabajou and other *Sasabirut* have the most sago gardens in *Toinong Muntei*.

Toinong Muntei is regularly flooded by a major river that brings rich nutrients and minerals from the surrounding hills and streams for the soil, but it also has open spaces getting plenty of sunlight, which is important for the quality of the tubers. People say the sun (*sulu*) should 'see' the taro, even though a handful of sago and banana trees are planted in the margins of taro fields. The sunlight warms the soil, maintains its moisture content, and ensures that it remains friable and does not become sticky, cloddy, heavy, and difficult to mound. The regular floods make irrigation unnecessary. The women just make a very shallow pond to catch the water. *Toinong Muntei* also has moist and loose sandy soil that is easily to pound and grind. Taro will not flourish in a garden that is too shady, because, it is said, it will be too cold, which is not conducive to the crop's growth. Further, this area is free from pigs. Fencing and digging soil to make a taro pond are not necessary. This ecological suitability allows people to have permanent gardens.

Table 8 and Figure 11 below present the schematic positions of taro gardens owned by Muntei's residents. Low-lying areas in and around the Mara River, Masilulua, Muntei stream, and a few spots in the sago gardens opposite the settlement (*kasilak*) are the second important location for taro gardens after *Toinong Muntei*. Sakukuret, Salakoppak, Sailuluni, and Saruruk have taro gardens in these locations.



TEOFILUS SAMEKMEK

Picture 20. A woman collects small fish, shrimps and frogs in a taro garden in the wet season.

The garden is a gendered space, culturally and economically important for women (2018)

Table 8. The Locations of Taro Gardens (Pugettekat) Cultivated and Owned by Muntei Residents (2015)

No.	Uma/Clan	No. of Families	Locations, Localities (Number of Gardens)	Total (in Mata)
Sasabirut				
1	Sabajou	5	Toinong Muntei: (21) Siberut Hulu (4), kasilak (3)	28
2	Sabulat	3	Toinong Muntei (2), Masilulua (2)	4
3	Sagari	11	Toinong Muntei (7), Masilulua (2) Siberut Hulu (5) Bat Mara (4) Kasilak (7) Maileppet (3)	30
4	Saguluw	1	Bat Mara (1) Kasilak (2)	3
5	Salakoppak	16	Kasilak (15) Toinong Muntei (11) Masilulua (4) Bat Mara (3) Bat Muntei (4)	37
6	Saleleggu	1	Toinong Muntei (3) Kasilak (1)	7
7	Sarorougot	3	Toinong Muntei (5) Bat Mara (1) Kasilak (3), Bat Muntei (1)	7
8	Saruruk	23	Toinong Muntei (11) Tingoik-ngoik (5) Kasilak (8)	24
9	Satotottake	2	Maliorak (1) Toinong Muntei (3) Kasilak (3)	7
10	Sauddeinuk	1	Kasilak (1) Rokdok (1)	2
Sarereiket				
11	Samekmek	13	Bat Kokok (11) Kasilak (9) Siberut Hulu (4) Toinong Muntei (14)	38
12	Sailuluni	2	Bat Mangorut (4) Kasilak (4)	8
13	Sakakaddut	8	Kasilak (3) Siberut Hulu (2)	5
14	Sakaliou	5	Bat Kaliou (15) Bat Mara (2), Silakoinan (3)	20
15	Sakukuret	13	Bat Mara (5) Kasilak (7) Siberut Hulu (2) Toinong Muntei (7)	21
16	Salemurat	3	Bat Muntei (2), Masilulua (1) Bat Mara (1)	4
17	Samapopopou	3	Toinong Muntei (2)(3) Kasilak (2) Siberut Hulu (3)	8
18	Samatotonan	3	Matotonan (2), Masilulua (2)	4
19	Satoleuru	1	Bat Mara (1) Kasilak (1)	4
20	Siritoitet	5	Madobak (2) Kasilak (1) Bat Mara (1)	9
Uma/family from Other Area				
21	Sabattilat	2	-	-
22	Sakerebau	1	Katurei (2)	2
23	Salabi	2	Bat Mara (1)	1
24	Samalaibibi	1	Toinong Muntei (1)	1
25	Saleilei	1	-	-
128				287

The least visible taro gardens are small spots located in the forest gardens surrounded by fruit trees and secondary forest growth. The total number and area of the sites is difficult to assess, but this type of taro garden indicates an integral system of forest cultivation. The limited amount of flat land in the forest gardens appears to have been mainly reserved for taro fields. This is the case for the taro gardens owned by Sakalio families on their ancestral land by the Kalio River and Samekmek families in Koko River. The taro is also planted alongside cash crops, notably cacao. In general, the table and figure indicate that people intensively use Toinong Muntei but also have taro gardens in various locations. It is safe to say that the availability of taro gardens is plentiful and more than enough for subsistence needs.

As with sago gardens, Muntei's residents count their *pugetekkat* in *mata*. The size of a taro field can vary but an average *mata* taro is about 250 square metres. On average, a family in Muntei possesses 2.3 *mata* taro. Some single families have between three and six *mata* taro gardens. Only two families have no taro gardens. Access to taro is exclusively held by the cultivator. The scarcity of suitable gardens means that access to taro gardens is slightly different from that to sago gardens. To some extent, a *mata* taro garden is a unit of family property. The mode of the land's appropriation for the constant exploitation gendered arrangement of taro fields grants owners exclusive rights.

Taro gardens, especially in *Toinong Muntei*, are now gaining importance and not only for subsistence. Reliable harvests allow women to sell the tubers for a steady price in Muara Siberut. While taro is still part of ritual feasts, the majority of the harvest is now sold. Good quality taro is also a souvenir for mainland people who visit Siberut when travelling or for work. The emergence of the market for taro has contributed to its cultivation. Every morning, women from the Sabajou, Saruruk, and Salakkopak families, who have more than enough sago gardens and always have a surplus of taro, bring tens of taro bundles, along with vegetables, coconuts, and bananas, to sell in the open market in Muara Siberut. Each bundle contains three or four robust tubers.

The emergence of a market for taro persuaded the women in Muntei to add a new variety of taro to their collection. They obtained at least four varieties from the southern islands (Pagai and Sipora). The abundance of taro varieties in Muntei reflects the relationships that residents have with people from outside the settlement. The composition of a garden and the very shape of the harvested taro are inspected as artefacts of the relationships that have allowed women to develop their role in the community.

Other Staples: Bananas, Cassava, and Sweet Potatoes

Bananas and Plantains

Muntei's residents know at least 27 varieties of edible bananas (*Musa paradisiaca* sp) and plantains (*Musa* sp.) (Appendix 2). The principal products for human consumption are the fruit, which is mashed, boiled on top of a metal oven, or roasted in a fire pit. Mashed banana is given to infants when they start to eat solid food. Ripe bananas are fried for breakfast or as a snack for visitors, while half-ripe ones are boiled, mashed, and mixed with taro as *subbet*. Plantain is mostly boiled in a pan as a substitute for taro. Unconsumed bananas are given to pigs.

The characteristics of bananas and plantains mean that they do not require specific arrangements for their cultivation. Biologically, bananas and plantains have no serious natural diseases on Siberut. This means either plantains or bananas can be inserted in any domesticated zones and they adapt to any terrain. They can grow both in *onaja* and in the hills garden. Socially, the cultivation of bananas and plantains is not rigidly gendered, both require the labour of men and women. The men are involved in opening the selected plot and transporting banana shoots from older gardens. Women will normally clean the field to allow new shoots to propagate and harvest the ripened bananas.

There are two banana-dominated areas around Muntei. One is *Toinong Muntei*, described above. There, bananas and plantains are cultivated alongside taro gardens. The other area can be found whenever a new garden (*tinungglu*) is started. The cultivation of bananas and plantains is not intensive or determined by the season. Prior to planting, all low vegetation and small trees are cleared. Fresh banana shoots are then simply put in a shallow hole which is made using a wooden sharp-pointed stick (*papakuru*). In the muddy area, banana shoots are often just simply pushed into the soil. The shoots are collected from around the new gardens or, if the cultivator selects a certain variety, they can be taken from old fields. Once the sprout is planted, bananas grow wild and dominate the area.

It is difficult to calculate the availability of bananas and plantains. Unlike sago and taro, these plants are not rigidly regulated and the term *mata* is not applied. They are available all year round, even in the drier season. The abundance of bananas and plantains contributes to the lack of regulation regarding access and rights. At any time, there is surplus of bananas. One can easily see rotten bananas in every kitchen. Any ripe banana in a garden can be taken without asking. If it is for immediate consumption, one can just grab a ripe banana from any tree anywhere.

In the last decade, there has been a change in the valuation of bananas. The mainland markets' demand for bananas has been steadily increasing. Bananas grown in Mentawai soil, especially in the freshly-cut forest areas, have seen an increase in their quality. The availability of a regular ferry and better transportation modes has enabled the transporting of bananas from Muntei to mainland Sumatra. Now, the banana is considered to be a commodity that can be sold and exchanged for *bulagat* (money). The market demand has slightly changed the ethic of access to bananas and plantains. Taking other people's bananas and selling them in the market is considered as theft. There are occasional cases of several bunches of bananas disappearing on Sunday afternoons when most people are at the church. Everyone in the settlement usually knows exactly who stole their fruit. However, while the thieves are regularly the object of conversations, there is a strong reluctance to punish the culprits. They take the theft lightly, as they know that the people responsible must have done so out of desperation to feed themselves and their children. There is an understanding that poorer families in the settlement do not own enough land and gardens in the vicinity of the settlement, as they may have moved to Muntei only recently. Suspicions of theft are made public only when the thief sells the stolen fruit to the shops.

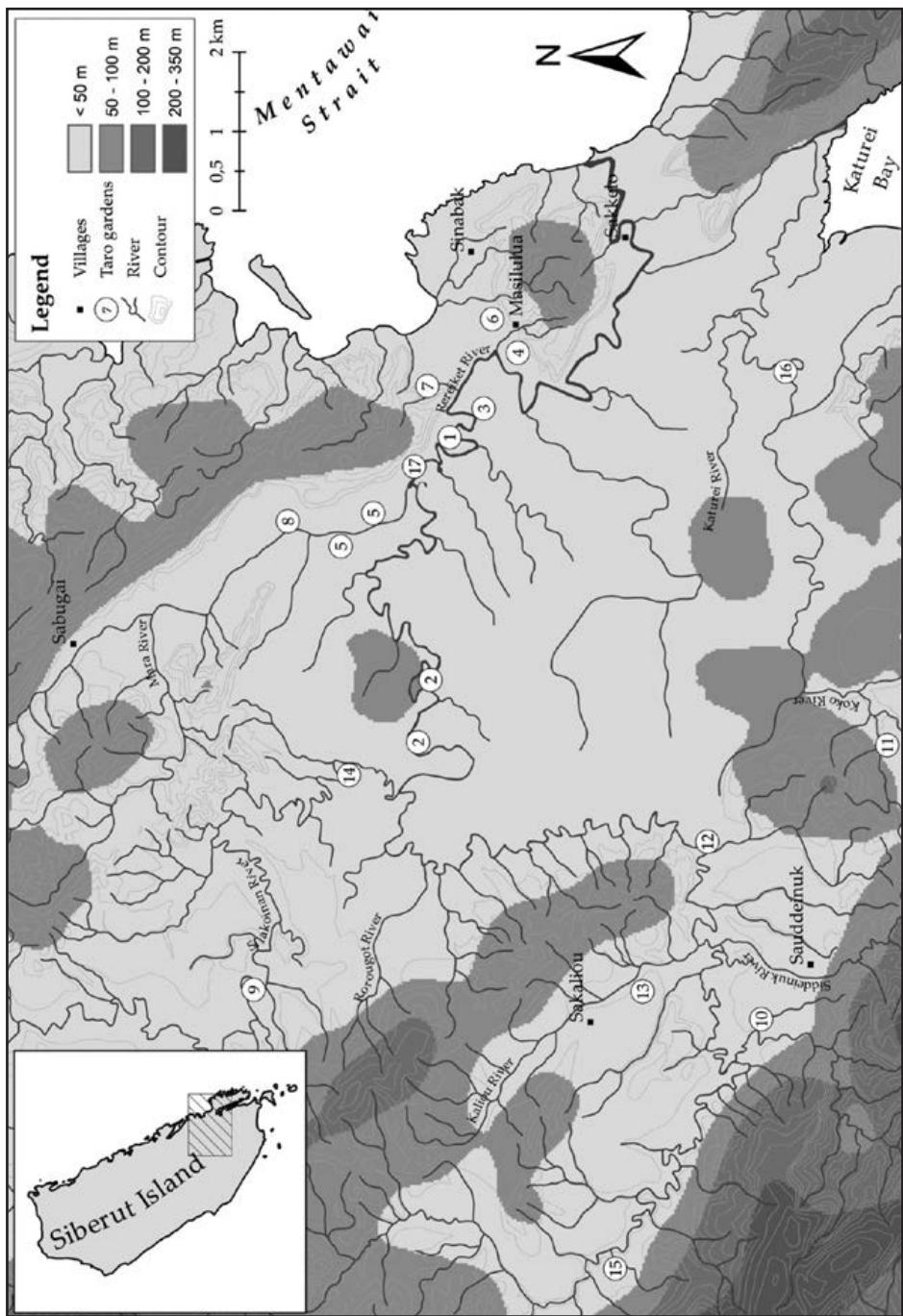
Cassava and Sweet Potatoes

Who, when, and how, cassava (*gobbik*) and sweet potatoes (*tetekket*) were introduced to Muntei is not clear. People say that their myths and ancestral stories do not contain either of these plants. Furthermore, the tubers do not have a specific tenure arrangement. Neither specific zones, nor a specific term qualifies the cultural role that is applied to the tubers. Muntei's residents know three varieties of cassava and six of sweet potatoes, all of which are sporadically cultivated. These plants are commonly planted along the fringe of any garden, marking the boundaries of the garden, but they soon spread to other parts of the garden.

The plants are normally propagated by stem cutting. These are almost always taken from the apical portion of the vine and cuttings from mature plants are preferred. They are grown almost everywhere in Muntei: one can find them around the houses, in fallowing *tinungglu*, in mature forest gardens, even around taro gardens. They quickly propagate in open spaces where sunlight is available. Cultivation of these tubers is mainly the responsibility of women. Men might clear a new area and do the heaviest work, such as removing the basal parts of the grass and unwanted bushes, while the women plant the stems and weed and harvest the tubers.

Cassava needs four months to mature before harvest; sweet potatoes require two or three more months. Both plants are available all year around but both are less-frequently consumed. There are no serious pests or diseases reported for either of these plants. Rats may cause damage to the tubers but there are no

Figure 11. The location of taro gardens (pugettak) cultivated and owned by Muntei residents (2015). The numbers in the circles refer to locations of the clans/umas stated in the first column in Table 8.



complaints of a harvest's failure at any of the cultivation sites. The sweet potato weevil can be a problem but is a serious menace only during the driest period. The only problem for these plants comes from feral pigs. Tubers are occasionally stored in the kitchen of the house, but are also left for long periods behind the house. They are mostly processed into a snack, either boiled or fried.

As with bananas, it is impossible to be certain of the production numbers for cassava and sweet potatoes at any level (family, *uma*, or hamlet). The tubers are continuously planted and harvested but are not consumed on a daily basis. Yet, cassava and sweet potatoes not only provide tubers but also leaves, which are consumed as vegetables. Everyone is free to pick cassava leaves from anyone's garden. There is a general understanding that, in particular, widows have the right to take any parts of cassava and sweet potatoes they find around the settlement, to ensure that they have something to eat.

Vegetables, Fruits, and Other Garden Products

Vegetables, Spices, and Annual Fruits

Spices, vegetables, fruit, and wild edible resources are numerous and present in abundant quantities in various productive zones. Vegetables are mostly found in *tinungglu* and home gardens while various fruits are cultivated in the later stage of a forest garden (*mone*). The most commonly cultivated and consumed vegetables are cassava leaves and *kangkung*, a kind of spinach. Cassava leaves are abundantly scattered around the forest gardens while *kangkung* is available only in small ponds near the settlement, or in taro gardens.

Occasionally, people also gather *lotlot*, banana blossoms, and the leaves of a gnetum family plant (*melinjo*) from the vicinity of their house to make a relish to accompany the staples. Despite being abundantly available, vegetables are not consumed regularly and sourced only when there is a dearth of meat. In general, the Mentawaians are not widely known as green enthusiasts. Some households have started to cultivate and consume new kinds of vegetables that have been introduced to the island, especially snake beans, green beans, chili, and eggplant, in their homes gardens and in *tinungglu* after various programmes from the local government and NGOs provided free seeds to plant and persuaded people to consume vegetables.

Spices are also commonly found in home gardens. Turmeric (*kiniu*), galangal (*lengkue*), fingerroot (*sikopuk*), lemongrass (*sereh*), and small chilis (*daro siboitok*) are the most common spices used and consumed by households. These spices are also widely deployed for aromatic or medicinal purposes. *Kiniu* or *sikopuk*, for example, are the basic components of a healing ritual, used either as herbs to drink (*koilokket*) or magic charms (*gaud*). *Daro siboitok* is used as a poison. As most of the home gardens only cover a small area and contain diverse useful plants, not many vegetables and spices are grown, usually only enough to meet the needs of domestic consumption.

The availability of vegetables and spices varies and corresponds to the types of gardens discussed in the previous sections. Table 9 provides an inventory of the edible resources in four sample plots of garden representing: a) traditional gardens in the lowland areas that have a complete *tinungglu* and *mone* cycle (the inventory was taken at a three-year-old garden in Mara River; b) a garden with a mix of fruit and cloves in a hilly area by the headwaters of the stream flowing through Muntei, where a flat area for tubers is not available; c) the coconut garden of a Saruruk family in Masilok, an islet devoted solely to coconut trees; d) the home garden of a Salakkopak family in the south of the settlement. Though a single inventory of this kind cannot be expected to take into account the variations, it does give a general picture of the availability of various non-staple resources.

It is clear from the table that the traditional forest garden is planted with a significant variety of vegetables and spices. The traditional garden is quite denuded of staples, spices, and vegetables. Any useful (food, ornamental, medicinal) plant is found extensively in this type of garden. In a typical garden

Table 9. Sample Edible Resources-Inventory for a Single Three Old-Year Plot of Four Types of Gardens, with Estimations of Plants' Abundance (2014)

Mentawaiian Taxa	Common Name, Scientific Name	Degree of Abundance (Three-Year-Old Garden)*			
		Garden Type 1 (Traditional)	Garden Type 2 (Hilly Garden)	Garden Type 3 (Coconut Garden)	Home Garden
Tubers					
Gettek	Taro, <i>Colocasia esculenta</i>	***	-	-	**
Gettek simatiet	Wild taro, <i>Colocasiae dioscorea</i>	***	-	-	-
Magok	Bananas and plantains, <i>Musa sp</i>	***	*	*	***
Ube	Wild yams, <i>Dioscorea alata</i>	***	-	-	*
Sagu	Sago, <i>Metroxylon Sago</i> and <i>Metroxylon rumphii</i>	***	-	-	*
Gobik	Cassava, <i>Manihot utilissima</i>	***	*	-	***
Tetekket	Sweet potatoes, <i>Ipomoea batatas</i>				
Vegetables and Spices					
Lotlot	Leaves of taro, <i>Colocasia esculenta</i>				
Pucuk princi	Leaves of cassava, <i>Manihot Utilisima</i>	***	*	-	***
Bua bagok	Banana flowers, <i>Musa sp</i>	***	*	-	***
Sereh	Lemongrass, <i>Cymbopogon citratus</i>	***	-	*	***
Kairiggi simalagak	Button Mangosteen, <i>Garcinia xanthoichthymus</i>	***	*	-	*
Taratti	Wild ginger, <i>Etingera elatior</i>	***	*	-	***
Terong	Eggplant, <i>Solanum melongena</i>	***	-	-	***
Daro	Chilli, <i>Capsicum frutescens</i>	***	-	-	***
Tomat	Tomatoes, <i>Lycopersicum esculentum</i>	***	-	*	***
Kacang tanah	Groundnut, <i>Arachis hypogaea</i>	***	-	-	***
Kole	Sugar cane, <i>Saccharum officinarum</i>	***	*	*	***
Kacang siata	Snake beans, <i>Vigna unguiculata</i>				
Sikopuk	Aromatic ginger, <i>Kaempferia galanga</i>	*	-	-	***
Matimun	Cucumber, <i>Cucumis sativus</i>	*	-	-	***
Tojet	Gnetum, <i>Gnetum gnemon</i>	***	-	-	***
Boncis	Green beans, <i>Phaseolus vulgaris</i>	*	-	-	***
Arimau sareu	Lime, <i>Citrus aurantiifolia</i>	*	-	-	***
Fruits					
Asit	Pineapples, <i>Ananas Comosus</i>	***	-	-	*
Sampelo	Papaya, <i>Carica Papaya</i>	***	-	-	*
Ailuluppa	Watery rose apple, <i>Eugenia aquea</i>	***	-	-	*
Sabbui	Common Guava, <i>Psidium guajava</i>	***	-	-	*
Bairabbit sareu	Rambutan, <i>Nephelium lappaceum</i>	*	-	-	*

- : not-present, ***: abundance, * : available

that maintains a full *tinunglu-mone*, edible plants start to dominate the area, in association and even competing with other grasses and unwanted weeds. If the garden is visited and managed simultaneously, it would have more diverse vegetables and spices, which would be more than enough for the next few years. The traditional type shares characteristics with the home garden in terms of the availability of edible resources. Both types of gardens are food banks. In the home garden, tubers are less abundant than in the traditional type but vegetables and spices are found in abundance. Annual fruits can also be found there, as in the traditional garden, although not in great numbers.

This is not the case for gardens that are filled with commercial crops. In gardens dominated by cloves (Type 2) and coconuts (Type 3), tubers and annual fruits are absent. Bananas, cassava, and a few spices and vegetables might be available but in limited numbers. The presence of cloves and coconuts and the requirement for clean and clear ground for these crops make the gardeners regularly weed the useful plants. All this implies a further difference between gardens with introduced cash crops and traditional fruit trees, where the number of vegetables and spices in the latter is much larger than that found in the former and is accompanied by the increasing domination of specific non-consumed plants.

Fruits (Bua)

Other seasonal but important plants food resources include numerous large leafy trees found in the forest gardens or to a lesser extent in home gardens. Any edible plants that contain flowers, seeds, or fruit are called *bua*. Coconuts are perhaps the most salient and the most important *bua* in terms of people's diet. The palm is an important source of food, for both humans and animals. The flesh of the coconut is extracted and used as a main ingredient for local curries. Grated coconut is used daily as a condiment for both human beings and livestock. The flesh of a young coconut and its water is used for a light snack called *jurutet*, mixed with sugar cane and any available fruit in the garden. Eating *jurutet* is a part of daily life when working in the garden. Other than for consumption, the leaves of the coconut tree are used to construct skirts, mats, baskets, and the walls of huts. Moreover, the shells of the nuts are used as fuel for fires and the shells are used as drinking cups or for storing tobacco. As a whole tree, the coconut palm is a valuable possession, used in most social exchanges. It also has economic importance as the source of dried coconut (copra).

While coconut is the most useful plant for daily use, the most socioculturally valuable plant in the forest garden is the durian tree. Mentawaians classify the durian into three species, namely, the toktuk (red durian, *Durio oxelanus*), the posinoso (wild durian *Durio graveolens*), and the doriat (durian, *Durio zibethinus*). Alongside durian, the presence of a number of fruit trees, including *siamung* (langsat, *Lansium domesticum*), bairabbit (rambutan, *Nephelium lappaceum*), *lakkopak* (mangostene, *Garcinia* sp), *peigu* (jackfruit, *Artocarpus integer*), and *abbangan* (wild mango, *Mangifera* spp) define a mature garden (Pictures 21). These fruit trees flower annually but they all produce fruit roughly about the same time once every two or three years, in a great harvest season locally known as the great fruit season (*rura*). The *rura* occurs when all the fruit trees bear fruit simultaneously, a period that may last two months or more, typically from mid-June to early September. Mango trees bear fruit first, followed by *rambutan*, *langsat*, and then durian. The jackfruit normally rounds-off the season. *Rura* is celebrated and shared by all present, including those who do not own the trees and non-Mentawaians.

Durian is considered the most valuable tree since it lasts longer than the other fruit trees. Many fruit trees produce fruit for two to three human generations, but a durian can produce fruit for seven or more generations. Although it is not truly native, the durian has long been naturalised and distributed throughout the Mentawai Islands. The fruit of a single durian tree does not drop all at once, but over a period of approximately ten to 35 days. Moreover, the trees do not all ripen at once. Any fruit that has fallen



DARMANTO

Picture 21. A mature garden full of fruit trees owned by a Salakoppak family near the settlement (2014)

is free to be collected by anyone. As falling durian fruits know no time of day, waiting in a hut at night has its own special thrills. Young people are willing to stay under the trees at night, waiting for the fruit to fall. Harvesters claim they often see or hear the spirits of the forest while they wait.

The oldest and densest durian trees are in the vast forest gardens in the old settlement. These are rarely visited but are bustling during the peak of *rura*. When most of the fruit is ripe, the owners of the trees invite their extended family, friends, neighbours, and even passers-by to pluck the fruit from the trees. This event is called *pananduk*, when all gathered share and freely comment on the quality, taste, and texture of the durian. All the plucked fruits brought home are consumed over the next few weeks. In the *rura* season, the consumption of fruit is remarkable. People often skip meals of sago or rice and replace them with durians and jackfruit. Both fruits are rich in carbohydrate, sucrose, and protein, all of which are important elements of the local diet.

Table 10 provides an indicator of the fruit trees' composition in different types of gardens. Fruit trees are mostly found in the first type of garden (traditional) and the fourth (home garden). The former is dominated by lasting native fruits while the latter is dominated by easily picked fruits such as malay water apple, rambutan, jackfruit, and coconuts. Home gardens contain not only native fruits, but also various introduced fruit trees such as kaffir limes, mainland mango, and jackfruit. In contrast, gardens with commercial crops (types 2 and 3) are dominated by single tree species, either coconuts or cloves. Durian and other fruit trees might still be found in a clove garden around the settlement, but they are not plentiful.

Fruit trees are commonly cultivated by individual families on certain plots of land and considered the family's property. Yet, like other food resources, they have always been subject to social exchanges. The fruit trees in a garden, therefore, might be owned and claimed by different people. In terms of their consumption, there is a generally accepted, if not formalised, rule that members of the *uma* have the



Picture 22. *Udduat*, a kind of mushroom, an additional source of 'meat' (2019)



Picture 23. *Ngebru*, another mushroom, an additional source of 'meat' (2019)

Table 10. Sample Fruit Inventory for a Single Mature Garden (>10 Years) Plot of Four Types of Garden, with Estimation of Plants' Abundance (2015)

Mentawaiian Taxa	Common Name, Scientific Name	Degree of Abundance (Mature Garden)*			
		Forest Garden Type 1	Forest Garden Type 2	Forest Garden Type 3	Home Garden
Native Fruits					
Peigu	Cempedak, <i>Artocarpus integer</i>	***	*	-	*
Abbangan	Wild mango, <i>Mangifera sp.</i>	***	*	-	*
Siamung	Langsat, <i>Lansium parasiticum</i>	***	*	-	*
Doriat	Durian, <i>Durio zibethinus</i>	***	*	-	-
Toktuk	Red durian, <i>Durio graveolens</i>	***	*	-	-
Pusinoso	Wild durian, <i>Durio dulcis</i>	***	*	-	-
Bairabbit	Wild rambutan, <i>Nepheliumsp</i>	***	*	-	-
Sabbui	Common guava, <i>Psidium guajava</i>	***	-	-	***
Kairiggi	Button mangosteen, <i>Garcinia dioica</i>	***	*	-	*
Lakkopak	Purple mangosteen, <i>Garcinia mangostana</i>	**	*	-	*
Ailuluppa	Water apple, <i>Syzygium sp.</i>	***	-	-	***
Ailuluppa leley	Wild rose apple, <i>Syzygium pycnanthum</i>	**	-	-	***
Limu	Wild mango <i>Mangifera macrocarpa</i>	***	-	-	*
Toitet	Coconut, <i>Cocos nucifera</i>	*	-	***	*
Muntei	Pomelo, <i>Citrus Maxima</i>	***	-	-	*
Teggeiluk	Wild langsat, <i>Baccaera lanceolata</i>	*	-		
Introduced Fruits					
Arimau sareu	Key lime, <i>Citrus aurantiifolia</i>	*	-	-	*
Arimau simananam	Common orange, <i>Citrus nobilis</i>	*	-	-	*
Arimau boitok	Kaffir lime, <i>Citrus hystrix</i>	*	-	-	*
Ailuppa sareu	Malay water apple, <i>Syzygium malaccense</i>	***	-	-	*
Bairabbit sareu	Rambutan, <i>Nephelium lappaceum</i>	*	*	-	*
Kweni	Kueni, <i>Mangifera odorata</i>	***	*	-	**
Peigu sareu	Jackfruit, <i>Artocarpus heterophylla</i>	*	*	-	***
Tojet	Gnetum, <i>Gnetum Gemon</i>	*	*	-	*
Sau	Sapodilla, <i>Manilkara zapota</i>	*	-	-	*
Sirsak	Soursop, <i>Annona muricata</i>	*	-	-	*

***: abundance, *: available, -: not-present

right to enjoy the fruits. The fruit trees normally function as a common food bank for the entire group, relatives, friends, and even passers-by who find fallen fruit lying on the ground. All members of the *uma* can freely collect and consume all the food planted in the communal land. Plucking a ripe durian or taking a bunch of langsat from other's people gardens is common practice. Fruit trees in faraway gardens tend to be harvested (*pananduk*) at certain times by all the members of the group, as collecting the entire fruits is impossible for one family to do. Older trees, planted by ancestors, ultimately become the group's property. In this way, the differential distribution and concentration of fruit trees and their ownership has some bearing on the development of the *uma* and the history of their movement.

The actual distribution and ownership pattern of fruit trees and mature gardens (*mone*) is shown in Table 6 and Figure 9 above. The distribution of fruit trees may indicate the approximate location of the residences of earlier generations, making it possible (at least to a limited extent) to trace the changes in the gardens' locations over a period of time. Many of the fruit trees are located around the old settlement of the residents. Meanwhile, the presence of old and mature durian and jackfruit trees around Muntei indicate the combination of earlier cultivation prior to the OPKM project and the earlier clove cultivation of people during the early years of the settlement.

Wild Plants

The inhabitants of Muntei also collect wild plants from the surrounding environment. Uncultivated plants are considerably less varied and are mostly obtained from the nearby forest. The most popular edible resources in *leleu* are three kinds of wild mushrooms: *udduat*, *buluk posa* (Picture 22 & 23), and *ngebbu*. The mushrooms are only available once or twice every three years. People said that when the earthquakes occur simultaneously, it is a sign that mushrooms will grow. The other edible wild plants obtained from the forest are shoots (*ogoet*) of the sugar palm (*poula*) and oncosperma palm (*arriribuk*). These plants are extracted when there are no vegetables available and are considered to be food for hungry people. *Ogoet* palms are not extracted on a regular basis but only occasionally when people venture into the forest. Most of the wild plants are toxic, requiring lengthy and complicated processes to make them edible. For example, raw *laggurek* fruit must be soaked in water for several nights and fermented for a few days before it can be cooked and eaten as spices for a black curry. The shoots of the *poula* palm cause a severe rash upon contact with human skin. All of these non-domesticated plants constitute an insignificant portion of the diet and are considered not to be reliable sources of edible matter.

At the edge of the forest, wild ferns (*leuk-leuk*), stalks of wild taro (*laiket*), wild eggplant (*dodolu*), and the flowers of wild ginger (*tairatti*) are sources of food. The variety and abundance of ginger and ferns increase towards the more open spaces between the gardens and the forest. The most important of these, in terms of their contribution to people's diets, is *leuk-leuk* and *tairatti*. Wild ferns are commonly gathered and cooked, but are also a source of income, particularly for older women and widows who collect and sell them to small Minangkabau restaurants in Muara Siberut. *Tairatti* is rarely consumed; it is used as an aromatic ingredient in curry.

3.3 The Availability of and Access to Animal Food (*Iba*)

Iba, is food derived from animals, both domesticated and wild. Invertebrates such as molluscs, crabs, various forms of insects, and worms are also considered *iba*. In general, *iba* is classified into several categories depending on the zones where it is obtained. Freshwater fish, eels, molluscs, crabs, shrimps, and frogs, mostly gathered in the rivers and estuaries, are commonly called 'meat from freshwater' (*iba*-

t-oinan). All sea creatures, including fish and octopuses, but particularly *sakokkok koat* and *masusurak*, are called 'meat from the sea' (*iba-t-koat*). Non-domesticated animals hunted in the forest are called 'meat from the forest' (*iba-t-leleu*). Small mammals (squirrels, pangolin) and birds are *iba-t-leleu*, but are mostly referred to by their individual names. Meat from domesticated zones (pigs, chickens, buffaloes, and ducks) is referred to by specific species names and has no collective term despite the fact it is generally known as ritual meat (*iba-t-punen*). A comprehensive list of animals consumed by people is presented in Appendix 3.

Meat from Freshwater (*Iba-t-oinan/Iba-t-sinanalep*)

Freshwater animals are mostly, but not exclusively, collected and gathered by women (Picture 24 & 25). This is why the term used to refer to meat from freshwater (*iba-t-oinan*) is conflated with the meat of women (*iba-t-sinanalep*). People have known more than forty species of freshwater fish, shrimp as well as clams and mussels gathered around estuary and brackish water (Appendix 3). Most of those species were consumed during my fieldwork. Although there is no Mentawaiian concept of a primary and dependable single source of food, freshwater animals, essentially products of the non-domesticated zones, remain the most reliable, stable, and significant source of protein for everyday meals obtained from non-market sources.

The majority of *iba-t-oinan* can be found in bodies of freshwater, such as brackish areas, the inundated areas between the forest and the gardens, rivers, and streams. Small streams and creeks, as well as the mangrove areas, are actually not entirely 'open access' areas since there are always one or more claimants. If particular areas of the forest are reserved for a certain purpose by a particular group or household, access to those areas would be restricted. Unless there is a warning (*kekre*), everyone is welcome to catch animals from these areas without any particular restriction.

The major rivers and streams around the settlement and the gardens are the most reliable source of *iba-t-oinan*. On a typical day, an adult woman and a few young girls who are not in school go to the nearby river, unless it is raining. Expeditions to capture fish and shrimps (*tutuk*) are also occasionally done at night, in a group. Torches are employed to startle the fish and shrimps and make them easy to catch. Fish are scooped up in fishing nets and tossed into a bamboo tube or a rattan basket. The catch is usually just enough for one or two family meals (*sanga kopman*).

Iba-t-oinan is rather abundant during the driest months when the water level of the rivers and streams is low. Then, women can not only catch fish but a variety of clams and mussels (Burgos 2013). Gathering and catching *iba-t-oinan* are usually done in groups, using nets (*subba*) made of natural twine or artificial fibre suspended on curved rattan frames. Shrimp and fish are trapped with *subba* at the edge of the river. In certain spots, women dive into the water for a few minutes to collect clams and mussels deep in the muddy ground. The spots are not permanent but normally located in a deeper and calmer part of the river.

When the rain has stopped for a few weeks, some groups of women may decide to go further downstream, to the brackish water at the mouth of the Katurei River or to the islets on the east coast, to collect and gather brackish shells, barnacles, and molluscs around the mangrove forests and beaches. Usually, they paddle a canoe for an hour. Fishing in this way is kind of an excursion and may last a few days. They may bring cooking utensils and portable shelters with them and stay several nights at the fishing grounds. Collective fishing is a lively communal activity and nearly every adolescent girl and adult woman without an infant in the settlement participates. As the mussels, clams, and snails around mangrove forest and brackish water are relatively diverse and abundant (Appendix 3), the catch is usually significant (Picture 26). Indeed, a woman can bring home a sack containing 15 to 25 kilograms of shells and mussels after a two or three-day expedition. Even when their efforts do not produce a big yield, the excitement and sense of togetherness that accompany collective fishing are considered good reasons for getting involved.



TEOFILUS SAMEKMEK

Picture 24. A Saruruk woman is fishing in Mara River (2014)



TEOFILUS SAMEKMEK

Picture 25. A woman is happy with the catch, caught in the net near Kokok River (2016)



Picture 26. The mangrove forest near Katurei River provides abundance of mussel and clams. Here a young woman collects mangrove whelk (*lilit*) (2016)

Another way to obtain *iba-t-oinan* during the dry season is by poisoning (*mutubba*) the water. After a stream is dammed, the root of *raggi* is pounded to obtain a poisonous sap. The stream is diked by placing a wattle of stones and mud across the stream at a point where it forks, is divided by a mound, or at a junction. A fish trap, made from bamboo (*leggeu*), is then placed there, parallel to the dam. Part of the group moves upstream while the others wait at the dam. The upstream group churns the water using the *raggi* root, causing poison to flow towards the dam. Poisoned fish, eels, and shrimp float to the surface to find fresh air or are scooped up by the women with their *subba*. Other fish swimming downstream enters into the traps. This method of fishing is used in tributaries of the Mara River and small streams; however, it should be noted that it is rarely used. During my entire fieldwork (14 months), I encountered just two *mutubba* by a Sakaliou and a Saruruk family in the Mara River near their gardens.

Fishing is also carried out in the wet season in streams and small ponds around taro gardens. When there is heavy rainfall after a few dry weeks in April or November, women visit their taro gardens and search for small fish and frogs. In the meantime, men catch catfish (*tuik*), eelfish (*sikapla*), and eels (*lojo*) in the swampy area near the settlement, particularly after small floods, using *leggeu* as well as a hook and line with sago grubs as bait (Pictures 27 & 28). A few inundated areas around the gardens are also fishing spots. *Lojo* in particular are easier to catch when ponds are murky after heavy rain. Women quickly jump into the ponds with their hand nets to scoop up the mud and litter where the animals are hiding.

During my fieldwork, elder women fished frequently, regardless of the dry or wet season. Younger women only fish when they can be certain of a good catch. Frogs and small fish are still attractive but only a few women go to their taro gardens after a heavy downpour. The young women now prefer to have enough cacao or coconut gardens, which decreases the time they have to spend fishing. Daily fishing is considered to be unpredictable. They also complain that they have to walk further from the settlement in order to



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Picture 27. A Samekmek man catches catfish (*tuik*) after a rainy day near Mara River (2016)



TEOFILUS SAMEKMEK

Picture 28. A young Samekmek hooks a giant river eel (*sikapla*) in Sabirut River in the rainy season (2016)

catch any significant amount of fish and shrimps. The availability of saltwater fish in the local market has also contributed to the decline in daily fishing. Buying either fresh or salted saltwater fish is preferred whenever cash is available, rather than going fishing. Despite the general decrease in fishing, women still enjoy going to Katurei Bay in a group to collect shrimps, clams and mussels (Picture 29).

The district government's recently introduced programme to create aquaculture has also added a source of *iba-t-oinan*. The local government's fisheries agency has encouraged people to make small ponds around the settlement and, to this end, it has provided technical assistance, including tools and training, and it has introduced exotic species such as common catfish and tilapia into these ponds (Puailigoubbat 2014, 2015). A small number of the ponds have been a success story but the majority are a total failure. The artificial ponds are simple but incompatible with the ecology of the island, especially given the amount of rainfall. In spacious home gardens the ponds have provided decent yields. The majority of ponds, however, were created around the streams and creeks, or inserted into the forest gardens. While fish may thrive in the ponds for a while, they disappear in the regular heavy rainfall and flooding before they can be harvested.

Various worms and insect larvae are another reliable source of animal protein considered as *iba-t-sinanalep*, despite not all of them being collected from freshwater sources. *Toek* is a long pink worm gathered from rotten trees that are put in the river. It is a semi-cultivated animal as *toek* occupy the logs of *tumu* (*Campnosperma auriculatum*) and *sikka* (*Glycosmis* sp.) that sink in the river. In about two months, when the log is split, the worms come out of the holes in the wood. The worms can be eaten raw or boiled. They are considered to be delicious and are significant to the daily diet, especially when saltwater fish are not available. Insect larvae are the main source of invertebrate food. There are names for different kinds of larvae and pupae. The grubs of the paper wasp are a delicacy, though hazardous to collect. The larvae of longhorn beetles (*leitik sabeu*) can be collected from rotting logs or trees deliberately felled in the gardens;



Picture 29. A group of women from *uma* Samekmek collects small fish, shrimps and mud clam (*meggu*) in brackish water near Katurei Bay (2016)

they are delicious but not particularly substantial. The larvae of insects living in the *karamangga* trees (*Ficus congesta*) called *sikku* are also collected. The latter is a delicious treat for women, but it is rare and difficult to obtain.

The larvae of the weevil beetle (*batra*) contribute most of the people's daily protein. A clue to the importance of *batra* is the different nomenclature that referred to them in different places. For the *Sarereiket*, the larva is called *tamra*. In another valley, it is called *subbai*. Muntei's residents cut the stumps of old sago trees to invite sago beetles to lay their eggs on them. The eggs are incubated in the palm for about two or three months. They are private property and exclusively gathered by women. The larva is delicious when eaten raw. The juicy and strong, lingering, rather rancid smell is clear evidence of delicious food. Live *batra* are wrapped in leaves and cooked in a pan or stuffed in a piece of bamboo stem and roasted. Yet, men rarely consume *batra*.

Meat from the Sea (*Iba-t-koat*)

The term *iba-t-koat* is applied to any animal living in the sea. It includes coral and deep-sea fish, squid, octopuses, and big clams (*kima*). Crabs collected by the women are also referred to *iba-t-koat*. Among the varieties of *iba-t-koat*, saltwater fish are the most stable element of the diet of Muntei residents. Located near the coastal settlements, people get daily access to fresh fish from the Minangkabau fishermen there. Especially since the availability of round-the-clock electricity in 2009, the Minangkabau fishermen and a number of Maileppet people have a constant supply of ice cubes and a proper fridge that keeps the catch fresh for a few days. This ensures the stock of fish from the sea is relatively stable. The improvement in the island's roads has also allowed the residents of Muntei to go to market to get either fresh or frozen fish on a regular basis. In just twenty minutes, they can reach Muara Siberut in the early morning and ask the Minangkabau fishermen about their night's catch. Over 170 species of saltwater fish are named and consumed (Appendix 3). In spite of the stable fish supply, not all of Muntei's residents have equal access to fish from the market, an issue I will come back to later, in the last chapter.

A tiny part of *iba-t-koat* consumed by Muntei residents is obtained by fishing in the coastal zone close to the coconut gardens. *Sasabirut*, who have gardens in the islets (*nusa*), go fishing with a hook and line from an outrigger canoe at the edge of the sea, mostly for subsistence supplies. Occasionally, they sink a gill net (*mujarik*) into the water in the evening and haul it out the next morning. *Mujarik* is carried out by men, but they are usually accompanied and assisted by their wives. The net (*jarik*) is put near the shore or in the reefs during the evening and left there overnight. The next morning, they check if any fish have been caught. Squid, cuttlefish, and octopuses are sometimes caught in the net and considered *iba-t-koat*. Another technique for fishing, exclusively done by men, includes throwing a casting net (*mujalo*) into the shallow beds around the mangrove forests in the morning. Before throwing the net, the men listen for the splash of water, which indicates the presence of fish. Then, they pull and drag the net to the beach to take out any fish they have caught.

Young men might dive the coral reefs and bring a spear to get a desirable coral fish. The latter is referred to as *manombak*, and the most prestigious catch is an octopus. Compared to the other methods, spearfishing is practiced less often. It requires additional tools, such as diving goggles and a snorkel, since the big fish that can be speared are not in the shallow beds. Fish are easier to spear at night. Young men are keen to go spearfishing using a flashlight. Despite fishing regularly, the coconut gardeners insist that they are not fishermen but *sipumone* (the gardeners). They do not fish for a living as the Minangkabau people do. Instead, it is just to fulfil their daily needs. When they collect more than they need, they smoke the fish and store them in bamboo. The surplus is brought to the settlement for their families. If there is someone asking *silakkra*, a sale is possible.



DARMANTO

Picture 30. Two women from Muntei do fishing in the mouth of Sabirut river in the morning, using a large net (*panu*) (2014)

Other kinds of *ibat-t-koat* are available periodically. Around the time of the full moon, small fish and crustaceans, especially *rourou* (greasyback shrimps, *Metapenaeus ensis*) appear in the mouth of the delta of the main river and the shallow beds around the coral reefs. When there is heavy rainfall, the siltation process brings a large amount of clay and dirt to the shallow seabed at the mouth of the river. The estuary becomes feculent and attracts *rourou*, which come seeking the rich detritus and humus from the silt. A group of four to six women go down to the mouth of the river early in the morning with a large fishing net (*panu*) and fish for about two to three hours (Pictures 30). The yield usually amounts to more than two kilograms of small fish, crabs, and shrimps.

As mentioned above, crabs are also categorised as *iba-t-koat* despite not all of them being obtained from the sea. Once every two years, the dry and stormy wind that comes from the northeast of Siberut brings *aggau* season. The season lasts anything from three weeks to three months. This period is marked by the emergence of crabs, named after the season, in the mangrove forests, beaches, and shallow coral beds in the eastern part of Siberut. Between mid-July and early September, the *aggau*, consisting of at least five different species, flock to the *nusa* to lay their eggs in the mangrove forest. *Sasabirut* stay in their coconut gardens during this stormy period to gather the crustaceans. People from other coastal settlements might join them. The *aggau* season, like the *rura*, is a social event full of excitement. People might construct a simple, temporary, hut around the spot. They use torches to attract the crabs at night. Young men and girls join the event and use it for dating or making friends. Live crabs are caught with curved sticks made from bamboo and put in baskets. In a few hours, a person can collect eight to 13 big *aggau*, equal to four kilograms.

While all the fish, clams, and crabs are considered proper meat, the most desirable and valued *iba-t-koat* are three species of turtles (*masusurak*) and dugong (*sakokkok koat*) obtained through hunting

(*muiba*). Hunting (*muiba*) is the only way to get valued *iba-t-koat* and two methods are practised. The first is cooperative hunting involving a large number of persons recruited specifically for the purpose, normally on a clan basis. The cooperative hunting is carried out on special occasions, normally to end a communal ritual. Largely because of the numbers involved, this type of hunting lacks mobility and flexibility and, most importantly, it is essentially a short-term pursuit. The second, individual hunting is undertaken by an individual or as a pair. The individual hunting is a kind of opportunistic hunting.

Hunting in the sea is only carried out by *Sasabirut* who have gardens in the islets with specialised nets and special floats. It also requires special offerings and magic charms to the spirits of the sea and not all people have hunting expertise. Hunting has limited success and is often hampered by factors such as the season and weather, the unpredictability of wild animals, and the lack of coordination. However, most people believe that the failure of a hunting expedition is caused by the failure to make offerings to the spirits of the sea. Over my year of observation (2012-2013), there were four cooperative hunting expeditions, none of which brought home a turtle. Only two out of seven individual hunts caught two turtles and one dugong. It can be said that hunting turtles and dugong contribute little to the people's diet despite them remaining important game animals, culturally and symbolically.

Forest Meat (*Iba-t-leleu*)

Wild pigs, four species of primates, and deer are the major sources of meat from the forests (*iba-t-leleu*). Culturally, they are the most important game animals, hunted exclusively by men in *leleu* to mark the end of a religious ritual. As with the methods for obtaining major *iba-t-koat*, hunting *iba-t-leleu* is undertaken in two ways. Cooperative hunting is largely done as part of a ritual by the men within an *uma*. The most common weapons employed are longbows, spears of various kinds and, occasionally, breech-loading rifles. This type of hunting requires the assistance of dogs. The presence of dogs on hunting trips tends to boost the catch and redirect the pursuit. The dogs patrol with or near the hunters and to an extent might direct the route taken. Hunting techniques vary from species to species, but the principal method for large game (particularly pigs and deer) is to chase the animal into an open space, such as a dry river bed, where it is easily ambushed by strategically placed marksmen.

Cooperative hunting for *iba-t-leleu* is essentially a daytime pursuit. An expedition rarely exceeds 24 hours and the hunting party is led by an ad hoc leader, who is usually chosen on the basis of seniority and experience, though most cooperation is simply by mutual agreement. A few members of the *uma* might depart the day before to identify the sleeping trees of hunted primates, or check whether the wild pigs are still around in a certain spot in the forest. Individual hunting is carried out by an individual or a pair and is rarely planned. It occurs when a gardener sees the tracks of animals or believes there are animals around his gardens. This hunting method is flexible and can be done at any time, whenever signs of animals are seen.

Muntei residents always remember their past hunting expeditions. Forest animals are also still culturally and symbolically important. The joy of retelling the dramatic events accompanying a hunting expedition is palpable. There is no doubt that people, particularly the older *Sarereiket*, still have an intimate knowledge of the forest and are skilled hunters, something that they are proud of. However, hunting forest animals has been practically abandoned. During my stay in 2012 and 2013, I did not encounter a single cooperative hunt of *iba-t-leleu*. Twice I observed people in the settlement who brought home a deer and a wild pig from the forest near to the end of 2014. Neither the deer, nor the boar was ritually hunted. All these animals were opportunistically obtained after a gardener had seen the tracks of a deer and then invited other gardeners in the adjacent area to organise a large hunting party. Some people said that hunting is no longer attractive because there are only a few forest animals left. This statement is doubtful. Primates are still frequently

seen around the Mara River. Even from the settlement, the sound of *bilou* (*Hylobates klossi*) can be heard everyday in the early morning. *Bokkoi* (*Macaca siberu siberu*) are also regularly encountered in the gardens close to the forested hills near the settlement, taking ripened bananas or papayas. It was also reported that deer are occasionally encountered grazing cassava leaves in gardens around the Mara River.

Laying traps for deer and feral pigs is still practiced, but largely restricted to the immediate area of the gardens, often as a protective device against those animals. A line of traps would be placed at the edge of the garden where the footprints of a deer or wild boar had been seen. A trap might also be placed in the margin of a garden where deer are occasionally seen grazing cassava leaves or wild boar damage the crops. Such traps do not have a fence to guide the quarry into the avenue of stakes, and thus it is baited. A chunk of sago pith might be placed in the path of the animals. The trapping of big mammals is not necessarily ritualised. It is a casual pursuit that occurs when people have some spare time after tending to their cash crops. This solitary type of hunting is considered to hinge mostly on luck. While the traps may not be far away from the garden, they are not regularly checked. Often, when the gardeners check the traps, they find the trapped animals have already decomposed.

Small mammals (pangolin, squirrels, civets, bats, flying foxes) and various species of birds are casually hunted and can be categorised as *iba-t-leleu*, but are normally referred to by their species name. *Lappa* (pangolin, *Manis javanica*) is considered to have the most delicious meat. It is also believed that this insectivore has certain properties that can cure some illnesses and help men regain their fitness. However, this animal loves to stay deep in the forest, so it is rarely seen and is difficult to find. Hunting pangolin is never deliberate, being undertaken only when people are lucky enough to encounter the animal when cutting rattan or making a canoe. Squirrels, civets, and bats are hunted occasionally since they regularly come to the gardens and are available throughout the year. Coconuts and the smell of ripened bananas attract them. Squirrels and civets are commonly shot with an air rifle. A hide might be created near the ripen fruit trees for the hunt. When small animals are about to approach they are shot.

Flying mammals (bats and flying fox) are considered to be delicious. Small bats are caught with a noose snare that people place in the fruit trees around their home gardens or the forest gardens in the vicinity of the settlement. When the bats are in abundance, scaffolding is erected throughout the entire tree by a group of men. The resulting catch must be divided equally among the participants. Sometimes, a group of small bats roost in the foliage. They can be dislodged by sturdy sticks or fishing nets. Large flying foxes (*leituak*) are more desirable than small bats. Two different species of *leituak* are hunted: *leituak simakotkot*, the large flying fox (*Pteropus vampyrus*) and *leituak simabo*, the small flying fox (*Pteropus hypomelanus enganus*). When the durian trees are flowering, men wait under the canopy with air rifles. As flying foxes are nocturnal animals, hunting is only undertaken for a few hours, usually from the late afternoon until midnight. The yield from such hunts is not particularly great. Heavy rain in the afternoon prevents the hunters staying for more than an hour around the gardens. People say hunting flying foxes gives relief from routine tasks and increases the pleasure of late evening meals.

All birds are considered edible but only few are hunted and eaten. Eagles, seabirds, and owls are clearly difficult to obtain. Birds of omen such as the tailorbird (*kuilak*) and the greater coucal (*kemut*) are never deliberately killed and eaten. Other small birds such as the sunbird and flower pecker are hunted by children but not consumed by adults. The favourite birds for hunting are *kailaba* (pied hornbill, *Buceros spp*), *ngorut* (green imperial pigeon, *Ducula aenea*), and *lemendeu* (thick-billed green pigeon, *Treron curvirostra*). *Kailaba* is still used as a decorative bird. People use *kailaba* feathers and bills as trophies, displayed in the longhouse. In the past, people climbed tall trees, where the nests of *kailaba* could be found, while the bird was incubating its eggs and they would take the adult bird. Nowadays, this practice is considered wasteful and unworthy. Instead, people use an air rifle when they encounter the bird in the

forest. Traps and glue made from jackfruit sap are employed to kill or capture green pigeon and imperial dove. If there is a flock of *ngorut* that frequently stays in the gardens a large kind of noose trap, manually operated, is used for catching the flock during the night. While those birds are regarded as delicious and available all year round, people do not organise a special expedition to obtain them.

Various reptiles are edible. Snakes (*ulo*), tortoises (*toulu*), and monitor lizards (*batek*) were also once considered to be *iba-t-leleu*; however, these are now considered to be inferior sources of meat and their consumption is detrimental to one's social status. Despite monitor lizards being meaty and in abundance, no-one in Muntei puts the flesh of the reptile on their plate. It is considered shameful to consume animals that eat carcasses and always steal food from humans. The crocodile is a special animal, considered as the embodiment of the spirit of the water. In the distant past, this animal was only hunted when someone drowned. The symbolic importance of crocodiles will be explained in Chapter 6.

Domestic Animals (*Iba-t-punen*)

Domesticated animals are the most desirable sources of animal protein. Pigs and chickens are traditional sources of meat and are available throughout the year, but people do not consume them frequently. The consumption of these animals, especially pigs, is reserved mainly for communal ceremonies and occasionally a large gathering in a church. These domestic animals are valuable because the entire cycle of production and consumption is laborious and associated with many taboos and cultural sanctions. They are also the most important gifts offered to spirits in religious rituals. Considered a toy of the spirits, it is believed that these animals can transcend the perspectives of the spirits of humans and ancestors (Schefold 1973; Hammons 2010). They are used as objects in any social exchange, for compensation payments, and for the bride-price. The size of a domestic animal not only defines the wealth of a person, but also their social prestige.

Chicken (*Goukgouk*)

Chickens are the second most important animals. Almost all the families in Muntei have at least a few of chickens. The practice of keeping chickens in Muntei is not significantly different to the traditional one in the neighbouring village of Katurei described a century ago (Kruyt 1979). Chickens are kept around and placed in the forest and sago gardens alongside pigs, as well as in the coconut gardens in *nusa*. In a garden, a small and open shelter called a *pugougoupat* (chicken hut) is constructed (Picture 31). A hen and its chicks are put into baskets (*roiget*), which are hung beneath the roof of the hut to protect them from snakes and lizards while the rooster and female fowls perch on an *ailuluppa* or a small *lakkopak* tree, where they are able to take refuge from those predators during the night. In the early morning, the hen and chicks are released from their baskets to roam and forage around the home garden or the forest gardens. A mix of sago pith and grated coconut is given to the chickens twice a day. If the location of the *pugougoupat* is not far away from the settlement, hens with eggs are brought to the settlement to brood until the chicks are hatched. A particular taboo and restriction such as bathing or eating sour fruits may be imposed on an owner when a hen hatches her eggs and nurtures her chicks.

People say that chicks bred in the settlement do not grow as big as chicks bred in forest gardens. Certainly, food for the chickens is more plentiful in the sago or forest gardens that surround the houses. When the chicks have grown bigger, several of them may be brought to the original *pugogoupat* to join the adult fowls and roosters. Despite the higher risk of natural predators, having more food to forage in the gardens and around the forest gives the chickens more sustenance. Some families have developed a strategy to make a semi-permanent *pugogoupat* that is easy to move to a new location after a predator attack. This strategy is also aimed at preventing *oiluk*, an epidemic that drastically reduces the population of chickens. When the *oiluk* attacks in the wet season, the impact is more severe, reducing the numbers



TEOFILUS SAMEKMEK

Picture 31. A shaman feeds his chickens with grated sago and coconut in his small chicken hut (*pugogoupat*) in the old settlement (Sabirut Hulu) (2018)

of chickens in certain areas to a critical point. Transporting chickens periodically to a new place lessens the risk of theft and protects them from *oiluk*. Another problem with keeping chickens comes from an invisible spirit called *silakikou*. The spirit attacks chickens in the night and takes their livers. Such attacks are unpredictable but can be devastating. To prevent this, the leaves of *baiko* (*Artocarpus* sp.) are put over the baskets during the night in the *pugogopat*, as *baiko* leaves are believed to chase the *silakikou* away.

It is difficult to calculate the exact number of chickens. The majority of the residents in Muntei have more than one chicken hut in several gardens. Most of these huts are not easily spotted as they are placed inside the gardens. Another problem is that as the gardens are far away from the settlement, many roosters and adult fowls are not fed regularly. They sleep not on a designated perch but anywhere they feel safe. Counting the number of chickens is always a delicate business. An exhaustive survey is impossible, while asking the owners will only result in hearty laughter. People commonly refuse to answer the formal question of how many chickens they have. The only occasion where the number may be estimated is at a ritual feast.

Pig (Sainak)

Pigs have been, and still are, the most important animal. A swampy area consisting of a combination of sago gardens and secondary growth opposite Muntei and a low-lying area around the Mara River and Silakoinan River has been the centre for pig keeping for people living in the southeastern part of Siberut, allowing the residents of Muntei and its adjacent settlement to keep pigs using a semi-domesticated method. It should be noted that the term 'semi-domesticated' here does not refer to 'traditional pig keeping'. A century



TEOFILUS SAMEKMEK

Picture 32. A pig hut located in the opposite of the settlement (2015)



TEOFILUS SAMEKMEK

Picture 33. Sago piths are laid out daily for semi-domesticated pigs (2015)

ago, during the Dutch administration, when the agglomerated settlement consisting of multiple *uma* and family living in a narrow space was created, the traditional way of keeping pigs beneath the longhouse and houses started to diminish.

In Muntei, the swine are tended around sago gardens across the river from the settlement (*kasilak*) and around the Mara River. The land for keeping pigs on is usually owned by a particular group. Each pig owner may borrow or buy a parcel of land to build a small hut (*pusainakat*) (Pictures 32). The herd can roam freely in a vast swampy area. This allows the herd to obtain most of their sustenance by foraging tubers, bananas, tender weeds, herbs, and molluscs from the regrown forest in abandoned gardens. While they obtain most of their sustenance by foraging in the secondary forest and abandoned gardens nearby and spent most of their time away, pigs are regularly returned to the hut, receiving significant amounts of sago pith (Picture 33). Pigs spend part of their lives in regular contact with humans and part foraging in the forest. In doing so, the animal has to travel every day between the domesticated zones (sago gardens, *pusainakat*) and the domain of spirits and undomesticated zones (forest, rivers, stream). Suffice to say, pigs live in the margins of social space. The untamed pigs have a chance to come into contact with feral pigs and all the spirits living in *leleu*. The ambiguities of life constitute a pig's quality and make the symbolism of the pig much more complex and rich.

Table 11 shows that during the early years in Muntei (the 1980s), 38 out of 76 families continued to raise pigs on their own in *kasilak* and in the old settlement at Siberut Hulu. During the first two decades of living in Muntei (1981-2000), the number of pigs was relatively steady, although the population doubled. Whilst a few people insisted on keeping their pigs in their old places at Siberut Hulu and the forest gardens by the Mara River, the majority of Muntei's residents moved their pigs across the river. Others brought their pigs in *nusa* and keep the animals under the shade of palm trees. The numbers of pigs per population and pig owners have sharply declined, by almost 200 per cent from 1982 to 2015. There were only 28 pigs owned by seven families in Muntei in 2015. It was possible that some owners were hiding their pigs, afraid that people would kill them or that the cacao growers would find out who the owners of the pigs were. The number of pigs in Muntei's territory might be more than the presented number, especially as the table does not count the number of pigs owned by migrant merchants. The number might also be more, since several owners might have reported the wrong number. It is also worth noting that 48 out of 98 pigs in November 2012 are owned by two Sakalio families who recently moved into the settlement from a village on the Kalio River, which is outside Muntei's territory.

Table 11. People and Pigs (Adult) in Muntei (2015)

	Date				
	1982*	2000*	Nov 2012	Nov 2014	Jun 2015**
Population	308	511	618	631	598
No. of <i>uma</i>	12	22	24	26	-
No. of family	76	112	144	151	144
No. of pig owners	38	29	17	8	5
No. of pigs	228	216	118	107	29
Pig owners	0.5	0.26	0.12	0.047	0.03
Pigs/population	0.74	0.42	0.19	0.17	0.04

* Household survey and oral history, **Data from Kepulauan Mentawai District's Bureau of Statistics

In general, pig owners rarely talk about their possessions. Boasting about the number of pigs owned is considered taboo. The data of June 2015, obtained from an official survey (BPS 2015) represents this general attitude. This official inquiry was carried out quickly, by conducting interviews but without checking or validating the answers. The number presented is much lower than the number I gathered. Nevertheless, there is no doubt that pig-keeping has been declining and shows no sign of recovering in the near future.

The decline in pig-keeping corresponds with the conversion of sago gardens and forest gardens to the cultivation of commercial crops, especially cacao. I was fortunate to closely observe how cacao cultivation contributes to the decline of pigs keeping in the settlement. On 29 July 2012, the three heads of the hamlets in the settlement signed off on an official document stating that the Mara River must be free from free-roaming pigs within four months⁹ (Appendix 4). The document was a decision to resolve a latent conflict between cacao growers and the pigs' owners, which initially started in 2007-2008 when the harvesting of cacao around Muntei began. The cacao growers complained that their cacao seeds and bananas were destroyed by roaming pigs. The pig owners claimed that four months were not enough to transport all their animals, as relocating pigs is laborious, requiring taboos and complicated rituals to be undertaken.

While the pig owners were busy moving the boars, the sows and their piglets would return at night and enter someone's garden. At the end of November 2012, a cacao grower from the neighbouring village of Maileppet, namely Aman Botak, speared to death two unidentified pigs in his garden near the Mara River. He claimed to have been busy guarding his garden for more than a year. A hedge, a ditch, and regular patrolling were not enough to prevent pigs from the surrounding areas getting into his garden and destroying the young cacao trees and devouring tubers and bananas. Aman Botak then slaughtered the pigs and shared the meat at a feast attended by dozens of other cacao growers—27 out of 41 were Muntei residents. His action stirred tumult in Muntei, as killing and eating another person's pig is serious misconduct, even if the animal entered one's garden or destroyed one's fenced-in taro field. An intentional threat or harmful action towards someone else's belongings is an indirect threat to the owners themselves. Destroying a garden or its elements, including pigs, is a serious social transgression. It is categorised as an assault and heavy compensation (*tulou*) must be paid. The killing generated severe tension. People started to believe that the pig owners might quietly retaliate by using sorcery (*tae*). They had reason to worry since they had eaten the pigs. Most of the cacao growers, however, backed Aman Botak's actions as they argued that an official warning from the hamlet's head had been given.

On 25 November 2012, the head of three hamlets in the settlement followed the earlier decision by organising an official meeting and issuing a written statement that officially instructed the pig owners around Muntei to move their herds away from the Mara River. They stated that the owners had two additional weeks to remove their animals. After the deadline, any free-roaming pigs would be hunted and killed. The decision was not taken easily. As in any discussion of pigs or land, the meeting featured insults, accusations, and threats. Some of the pig owners rejected the decision and walked off. The rest had no choice but to accept the decision. In the end, more than half of Muntei's residents signed the final decision, which practically ended traditional pig husbandry in the area around the Mara and Masilulua rivers, which had been transformed into cacao growing areas.

The steady rise of cacao or coconut cultivation around Muntei transformed the sago and forest gardens and meant that semi-domesticated pig-keeping was no longer possible. The area where pigs previously browsed wild tubers, snails, and roots was cleared, planted with cacao, and fenced. The cacao growers have invested their money and other possessions in land, and they expect this investment to get a decent return. Some of them are migrants who do not want pigs around their gardens. After the swampy areas have been bought individually and cultivated with cacao, all tubers, wild plants, and animals within these plots of land belong exclusively to the individual owner. This makes the husbandry of semi-domesticated pigs,

which relies on an extensive area, impossible to maintain. There is a change in perception about traditional pig-keeping: allowing pigs to roam freely became a threat to cash crop cultivation. Now, there are only a few places around Muntei that can be used for semi-domesticated pigs (Table 12).

The decline in keeping pigs in Muntei might represent the decline of the traditional ways of life and the importance of the cash economy, but it in no way defines the decline of the importance of pigs and pork. Pigs continue to be a salient feature of life in Muntei, particularly for rituals and there is no reason for people to completely abandon pork consumption. During my fieldwork, the use of pigs in Muntei was clearly no less important than in the past. Marriage rituals (*pangurei*) involved pork after the wife-taker and wife-giver *umas* agreed to settle the amount of the bride-price and dowry, which are generally paid, along with other things, in live pigs and pork. Healing rituals (*pabetei*), particularly for intractable sicknesses, required a pig's carcass, while mortuary ceremonies (*panunggru*) were all accompanied by the slaughter of pigs and the distribution of pork among relatives and allies.

Table 12. *The Owners of the Pigs and the Recent Locations of the Pigs' Huts (Pusainakkat) around Muntei as per 31 December 2014*

<i>Uma/Clan</i>	<i>Locations</i>	<i>Number of Adult Swine (in Total)</i>
Sakukuret	Kasilak; Siberut Hulu	31
Sakaliou	Kalio River; Silakoinan	20
Sailuluni	Kasilak	17
Samekmek	Kasilak; Masilok	6
Sagari	Masilok	6
Salakoppak	Kasilak; Masilok	7
Samapopopu	Kasilak; Masilok	8
Saruruk	Parakbatu; Masilok	9
Total		107

The need for pigs has been and will continue to be high in the near future. There is always a shortage of pigs when it comes to a ritual feast, especially during the Christmas and New Year festivities. The price of and the demand for pigs (and pork) have constantly increased. People often say that they prefer to have a proper coconut or cacao garden, obtain a decent profit from them and that money can be used to buy pigs from other people. Further, the increased demand for pigs offers a chance for individuals to become specialist pig farmers and opens great economic opportunities.

Mainland Animals (Ducks, Cows, Goats, Water Buffalo)

Ducks, goats, cows, and water buffaloes are not native domestic animals but they, too, are considered to be *iba* and given a specific name. These animals were introduced from mainland Sumatra to Muntei in the 1970s under various central and local government programmes. The catalyst for this move was the government's view that pigs were dirty animals that spread disease, damage crops, and are a nuisance to villagers. Mainland livestock was considered superior and thus introduced to replace the pigs and to encourage modern methods of animal husbandry. The introduction of these animals initially met with some resistance.

Over the years, most introduced animals have been 'indigenised' as Mentawaians have found ways to integrate the animals into their cultivation systems. Cows and buffaloes were taken straight to the sago

gardens. They were allowed to roam freely without regular fences or tethers. No longer in daily contact with humans, the animals gradually became shy and even wild. They do not need intensive veterinary care and, like pigs, graze freely. Goats are the only exception. Muntei residents never accepted the goats into their lives. Goat meat is considered to be *makasak* (smelly). The animals also cause trouble since they refuse to be confined to one place and freely eat cultivated plants, causing damage to home gardens.

Cows or buffaloes are valuable animals. Yet, people do not consider them to be their favourite animals. Only two families in Muntei (from Sakalio and Sailuluni) have cows, which were obtained from a Minangkabau friend. The Sakalio family keeps cows in their forest gardens near the Kalio River, while the Sailuluni family put their animals opposite the settlement. Keeping the bovines does not require special skills or techniques, but catching feral cows and buffaloes is difficult. Cows and buffaloes might be used for the payment of compensation, but they are no significant in terms of people's diet. They are not slaughtered for ritual feasts, unless they are dying, rather they are sold to Minangkabau traders.

Ducks are perhaps the most successful mainland animal adopted by the settlement. There are two kinds of ducks in Muntei: common duck and manila duck. Both are usually kept around the houses, foraging in the small creeks and ponds. Ducks are not brought to the forest gardens, as it is believed that, unlike chickens, they are not capable of staying on a perch at night, when lizards and snakes hunt. However, it is said that ducks are more immune than chickens to *oiluk* and are rarely attacked by *silakikiou*. Unlike the chickens, the ducks and ducklings are not fed regularly with grated coconut and sago pith. Instead, they find their sustenance in streams and creeks and inside the gardens around the settlement. More importantly, ducks can be used as a substitute for chickens, although ducks are not consumed regularly for daily meals, but reserved for communal feasts.

3.4 The Availability of and Access to Imported Food

Imported food is available all year round in the market and through the development projects delivered by both the district and central governments. Rice and sugar are by far the most important products. The shop owners informed me that they sell roughly 40 kilograms of rice per week to Muntei's residents alone. Given that there are six shops in the settlement, it can be calculated that, each week, the entire population consumes about 240 kilograms of rice. This number is subject to fluctuations, however, as people purchase rice and sugar in the local stores when they have money from selling their crops. Moreover, the sales of rice decline when the government provides subsidised rice or RASKIN (Beras Orang Miskin) for poor people.

Rice is a prestige food, imported from the mainland, and therefore it is expensive. It is also the staple food of people who have a regular salary from high status jobs, such as permanent teachers, nurses, or other government positions. Most people consume rice whenever they have decent money (*mabulagat*) at hand, enabling them to avoid the hard work of extracting and processing sago palms. The ability to have rice with a meal indicates that a person is engaged in business outside of the traditional activities, whether it is involved in a governmental project or work related to external agencies (see Delfi 2011). It may also indicate that a person has recently sold a significant amount of cacao beans or cloves, or is due to have a guest—be it a tourist, a researcher, or government officials. Rice is also associated with secular communal gatherings. A rice meal is usually served as a lunch for a village meeting. Rice is most frequently consumed at the end of the year, during Christmas and New Year, when it is eaten alongside imported items like cookies and imported drinks such as syrup, beer, or canned milk.

Further, rice is highly valued because it is connote with being 'modern' or 'advanced'. Muntei's residents realise that most of the non-Mentawaians that they watch on television, read about in school



DARMANTO

Picture 34. People distribute poor people's rice (RASKIN) in the village office (2014)

books, curiously observe in a migrant village, and experience when they visit Jakarta or mainland Sumatra, are rice eaters. The young generation of Muntei have also learned that sago producers and eaters living in other parts of the country are frequently presented. E.g. on the TV news, as backward.

There is a general perception among the residents of Muntei that rice has certain properties that are better than their native staples. First, rice is seen as 'sweeter' (*mananam*) than sago and taro. It can be consumed as a proper meal without any 'fringe' dishes like vegetables or meat. White rice does not dirty the hands of the cook, unlike sago. Cooking and serving rice-based meals are seen as easier and requiring a shorter preparation time compared to the hours required for meals based on sago or taro. It seems that the materiality of rice (white, soft, 'sweet', less cooking time) helps to convey the cleanliness, purity, efficiency, and 'sweetness' associated with modern food (Mintz 1985). The Mentawai people clearly share in the national idea to equate rice-based meals with all that is up-to-date and modern. Rice eventually becomes an object of longing. The 'sweet' taste of rice reflects the pleasure of modernity. Consuming rice is seen as a way of augmenting the status of being modern and prosperous. Rice enables the Mentawai people to obtain recognition and the social status of being 'modern' in the eyes of outsiders. It is shown by the way they organize their rice-based meals (Delfi 2011). While sago- and tuber-based meals are consumed in the kitchen, rice-based meals are moved to the open space of the veranda, where the family meal is in full sight of passers-by. Rice-based meals are a display of social difference and status.

My last fieldwork at the end of 2018 and early 2019 gave an idea of how rice is strongly associated with modernity and the expansion of local ideas of prosperity. Traditionally, the Mentawai people use the terms *makayo* (prosper) and *magebak* (poor) to refer to their economic status. A household and an *uma* with a vast area of ancestral land, several sago gardens, dozens of fruit trees in various forest gardens, pigs, and big longhouses are considered *makayo*. When I visited Aman Limakok, a well-known pig-keeper who owns

various sago gardens, fruit trees and a decent house, he was half-jokingly and half-seriously telling me that now he is categorized as a poor man. This came as a surprise as he was traditionally referred to as being 'prosperous'. Yet, he told me:

We are poor. We only eat sago. The government gave me poor people's rice. Now I am a poor person. The rich people are working in the village office or being teacher. They have regular earnings and eat rice regularly. They do not eat cheap and bad rice from the government. Just the poor like us eat poor rice.

'Cheap and bad' rice refers to the provisions from the central government through the Poor People's Rice program (*Beras Untuk Orang Miskin* or RASKIN). The RASKIN program delivers subsidized rice to those in food-insecure areas throughout Indonesia. Since 2004, Siberut has been a priority area for this program. Over a 15-year period (2004-2019), more than 32.7 million kilograms of rice were transported and distributed to 10,040 households (Picture 34). Most Mentawai people are recipients of the program, justifying them claim of being 'poor' people. Between 2011 and 2015, each family in Muntei received roughly 234 kilograms from RASKIN per year (Table 13). Although the RASKIN programme does not necessarily deliberately undermine sago or taro, it has reinforced an old idea that for Muntei people to be developed, secure, and healthy, they must consume rice. The quality of RASKIN is not particularly good. Yet, the amount provided can feed a family for a few months, and is provided at a greatly subsidised rate. Each family pays just \$US 1 per sack (35 kilograms) of rice. This money does not actually pay for the rice, but rather for the cost of transporting the rice from the harbour to the village. In the local market, the price for the sack of rice is just enough for a kilogram of rice.

Table 13. The Average of RASKIN Received by Each Family in Muntei (2011-2015)

Average	Year				
	2011*	2012**	2013**	2014**	2015*
Kg (in Total)	180	270	210	240	270

* *Puailigoubat* ** *Fieldwork*

While people in Muntei have enjoyed RASKIN, they have, in general, ambivalent responses toward rice. While it is considered 'sweeter' and tastier, the grain does not satisfy them. There is a popular saying that rice does not satiate the belly for long. Unlike sago or taro, which are commonly roasted solid, rice is always mixed with water in the cooking process. With water in the grain, rice is easily absorbed in the body. It has more liquid than *tubbu* (essence) and does not help to constitute the body and blood. Their stomach feels empty, and their body feels hungry again just a few hours after eating. The ambiguous sensory impression of rice on the tongue and body carries an awareness of a subtle response to a foreign substance. People do not accept introduced substances into their foodways in an arbitrary manner but rather, in structured and historically contextualized ways (Bourdieu 1984; Falk 1991). The 'sweetness' and tastiness of rice may demonstrate the lure of modernity, but the 'wetness' and inability of rice to satiate reveal that people have a point of refusal. The delivery of RASKIN in 2014 evokes the ambiguous perception toward rice. At the end of October, each family in Muntei received about 130 kg rice. The problem was that the rice was of poor quality: it smelled bad and it was dirty. Aman Limakok took the rice. He asked his wife to cook the grain every single day. Yet, they did not consume the rice but gave it to the chickens and the pigs.

While rice is occasionally bought in the market and provided by the government, sugar is an imported

food that is consumed daily. People's fondness for sugar is clear from the way they consume their drinks. A sweet drink is a must to start every day. Tea or coffee without sugar is not considered a proper beverage. While sago flour or rice is not always available in the gardens, sugar is a staple condiment and brought wherever people stay away from the settlement overnight. Occasionally, sugar is also added to roasted sago. A family buys approximately one kilogram of sugar every three or four days. According to Muntei's shop owners, sugar is the highest selling comestible (matched only by cigarettes).

Ready-to-eat food such as instant noodles and canned fish are also available in the market. However, canned meat has never been popular among Muntei's residents. Instant noodles are a favourite for kids but never considered as proper food by the adults. These instant foods are frequently bought by tourists, visitors, or government officials on duty in the settlement. Plain bread is available weekly at a limited number of stores in Muara Siberut. Biscuits, crackers, and sweets are bought from the stores as snacks for children. The latter type of food is occasionally bought when people have extra cash or have a guest from outside the settlement.

While there is an increasing trend for buying food and groceries from the market, introduced food is still seen as a supplementary item rather than a staple. Consuming rice or noodles is seen as a way of augmenting one's social prestige. It is unheard of for people to sell freshly caught fish or live pigs and then use the money to buy a kilogram of rice or a tin of Japanese canned fish from the store. While rice or other imported foodstuffs carry prestige, it is considered shameful to exchange fresh and nutritious local food for imported ones. Exactly how *kat*, *iba*, and the imported food described above are consumed is the subject of the next chapter.