

# Food Sovereignty of Communities in the Margins of the Nation:

## Staple Food and Politics in Mentawai, West Sumatra

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**Abstract**— In Indonesia the main staple food is often perceived to be limited to rice consumption. This is perhaps enforced by the *beras sejahtera* (Rastra) government 2017 program in distributing rice quotas to the economically challenged groups in society, and secondly by the virtue of a strong government focus on “rice self-sufficiency” programs. However, Indonesia has a variety of regional staple food. On Siberut Island the rural diet traditionally includes sago, taro and banana. The availability of those staple foods is chiefly governed by the cultural acquired harvesting skills and the precise pockets that encourage the planting of certain food types on the island. Both, the current government’s rice assistance program and the policy to advance rice cultivation, is perhaps at odds with the tradition and land condition, which requires closer investigation. This research was conducted in several villages on Siberut Island, using a qualitative approach and data collection. The main findings showed the potential to increase the yields of traditional staple foods. It was feared the introduction of intensive rice farming would perhaps divert rural resources away from the traditional gathering of local food or the planting of taro and banana trees. This trend could have an adverse effect on rural household food sovereignty.

**Keywords**—*food assistance; Mentawai; staple food; food sovereignty*

### I. INTRODUCTION

The Mentawai islands are a small sparsely populated archipelago located in the Indian Ocean, about eight hours by ferry from the mainland on the west coast of Sumatra. The Mentawaians were granted district autonomy from their cultural Minangkabau mainland counterpart district in 1999. The main drive for a separate governmental district administration was largely due to their social-cultural identity and economic differences. As a result of the Mentawai island economy, which is largely based on marine and forest resources and plantation agriculture, such as coconut, cacao, rubber, sago and banana, Mentawai is in a challenging position to upscale itself economically. Similar to many other traditional communities, the people in Mentawai are, besides internal

initiated changes, also subject to external changes lead by central government policy and influences through globalization. Those external forces have increased the pace of cultural change immensely, especially at the periphery of the Indonesian nation, where external influences can be even greater. From virtual having been left to themselves in previous times, in the last decade, due to satellite and internet connections, communities on the periphery of the nation have shown up on the radar. This is for all kinds of reasons such as administrative matters, education, health, the long arm of the law and bureaucrats. In the meantime, those local and distant environments have become very interesting for external parties for all kinds of exploration and development reasons. Previously those mentioned prospects were out of order, but as technology has leapt forward and advances in sciences have become exponential, so has the reach and demand of a growing global population of seven billion individuals.

Communities in this small archipelago and especially on Siberut Island, live traditionally in communal longhouses called *uma*, which are surrounded by forests the include sago groves, patches of planted taros and bananas, all depending on the local environmental condition, number of members in the *uma* and means of transportation. With the use of dugout canoes, crops and forest finds are transported back to the *uma* or wherever their main abode might be. Tradable forest products are also sent by dugout canoes to downstream traders. Those products are traded again to the mainland of which eventually end up in the final products of perhaps car tires in Europe, or desirable perfumes in France, or desired incense in the Gulf area where the most exquisite smells will be noticed in the top floors of skyscrapers overlooking Arabian desert.

To return to Mentawai, in this manner, sago trunks cut up in one meter lengths, are habitually floated down to their places of abode. The cut-up trunks keep well for several weeks in the water before they are hauled onto the riverbanks when needed for animal feedstock or human consumption. Links between the clans would typically be established through marriage, creating blood relations with other longhouses [1]. From the 1950’s till the late 1990’s a government desire was formed to

raise the national living standards on a par with those of the highly developed parts in Java. Java as a favored part of Indonesia has since colonial times received the lion's share of the means to advance, as the seat of government which was located in Jakarta. Remote located clan structures, reliant on communalism systems such as inspired by the *uma* and clans, were considered a hinder to advancement. Guided by a set of national policies, the government encouraged to address the perceived shortcomings of the communalism and turned to samples of urbanism that had developed in Indonesia. The government allowed funding of several new settlements in Mentawai with houses set in an urban grid like formation, instead of longhouses. This format would advance different clans to settle together in a cultural change never experienced before in Mentawai. In this modus, the transformation in compacting communities together, it promoted a simplification of national government administration, government services, but perhaps also a better central government control of the population [2]. A settlement was not only a convenient location to introduce mainstream contemporary thoughts, education and healthcare, but also the ridged central government philosophy of community living, a national view of the world and sanctioned faiths or organizations and frameworks of thinking. In 1999, when regional autonomy was introduced to Mentawai and in 2000 to all other parts of Indonesia when President Suharto was forced to resign, administrative changes took place. A subsequent formation of a new local government district was pushed through. It established local politicians with local ambitions with no direct vested interest of the central government and local staff. Their allegiance is anticipated to be aligned with the local economy and social development of Mentawai.

The Mentawai extended clan structure is centered on the physical *uma* longhouse. This is the main building where the clan members gather for important ceremonial functions, such as weddings or healing ceremonies. In this manner, the building would be perhaps unused for periods of time as families stay sometimes for lengths of time in their preferred shelter. To tend their fields, make canoes or whatever catches their interest, if not living in the *lalep* or *sapou*. Those dwellings are located a mere short distance away from the *uma* to provide family and individual privacy. The surrounding *uma* domain provides general ample food security to the clan and their associated members. In a change to a promoted village settlement with facilities such as a school and government clinic (*puskesmas*), a part of the Mentawai population has moved to urban like settlements (*barasi*), areas without the same rate of food security enjoyed in the original clan domain.

Besides the discourse from *uma* living to settlement and revival of time honored customs in regional autonomy, a veil is also being lifted in this paper, on food tradition and the gradual move from locally grown sago (*Metroxylon sagu*) to consumption of shipped in rice (*Oryza sativa*) from mainland West Sumatra. The elements of traditional housing, customs, and staple food consumption appear to be all interlinked, and therefore the approach of the research is to start with changes in food consumption and relate other patterns of cultural changes and food security from those. The adjustment from a clan based social exchange, to mixed community living has

future implications of food stock patterns in Mentawai. The principle query in this paper is therefore if a shift from *uma* to settlement housing has changed their perception that their personal food sovereignty has been somehow compromised or not? This paper is the author's assessment of a collection of opinions from interviews to analyze Mentawaiian perceptions. Traditionally members of an *uma* can control their immediate food access or food productivity. In a *barasi*, this is reduced as members are living further away from their traditional food source, however closer to food that can be purchased.

## II. ISLAND PROVISIONS

Several times in Muntei, Puro Maileppet and other hamlets along the Rereiket River, like in Rokdog, Madobag and Ugai on Siberut Island were heard, "Non Mentawaians eat rice, it is delicious! Mentawaians eat sago, it is black!" While the color of the in bamboo roasted sago was said, "It makes your hands dirty while eating". This was the opinion of a few who were raised on a sago diet on Siberut Island, the largest in the chain of the four main islands and several dozens of smaller islands that make up the Mentawai archipelago. Siberut harbour and the main settlement of Muara Siberut are located about 10 km from the Muntei community, where most of the research was conducted. The island is blessed with equatorial rainfall and forest, thus lush vegetation. The island has many creeks lined with endemic sago trees which grow well along the banks of the river and waterlogged areas on the island. Sago is not planted, it grows prolifically without any human interaction to stimulate propagation. It serves as the most important staple food for the rural Mentawaiian population and is important in the traditional ritual of the shaman or Sikerei [3]. This is in addition to a dozen or so differ types of bananas (*Musa acuminata*), taro (*Colocasia esculenta*) and a host of other edible tropical root vegetables and tubers that are of dietary significance in Mentawai. In addition to a starch intake, many seasonal island fruits, including berries and durian are available, which might replace other food intakes at the height of the fruiting season. When bumper crops of durian are experienced, it might be that some will forgo eating anything else but durian. For the Mentawaians, living close to the sea or river, line caught fish or fish or shell fish caught with a net provide a variety of animal protein. With an expanding human population, animals that can be hunted has been reduced.

Besides indigenous inhabitants, migrants also have been attracted to the Mentawai islands. Most migrants are, ethnic Minangkabau and Batak from the Sumatran mainland, or Nias a large island located north of Mentawai. With no access to ancestral sago fields and no active skills to extract starch from sago palm trunks, migrants usually consume rice as part of their main diet. As a matter of fact, many Mentawaians, especially the young ones, prefer rice too, but as the supply of mainly Sumatran grown rice is more expensive than locally grown sago, it is normally eaten on special occasions in their *uma* or homes. The higher price and the import nature of rice, has raised its status as a symbolic prestigious, perhaps on the same level as noodles, which are manufactured on the mainland Sumatera or as far away as Java.

From the explanation above, it can be deduced that if the family rice intake is extended to several times a week, they might be perceived as affluent or perhaps nontraditional community members. The consumption pattern might suggest the family is in some sort of business or extended cash crop activity. Able to sell their harvest to a trader or are perhaps employed as public servants or in an enterprise. Cash crops which come to mind are, cocoa, rubber, cloves or copra, betel nut, and the nilam plant from which patchouli oil is distilled. The derived income from wages, business or trading enables to buy food, instead of working in the field to harvest their own food. It is suggested that an attempt by the mainland government to introduce a rice growing culture to a population with a rural sago tradition has perhaps missed the cultural capacity.

### III. RICE SELF-SUFFICIENCY

Self-sufficiency of community or *masyarakat swasembada* in rice propagation is a popular central government policy. A few irrigated rice fields created in a government initiative are located around the main trading town of Muara Siberut about 20 kilometers away from Muntei. Most of the nonindigenous Minangkabau traders and public servants reside in Muara Siberut. Those projects that are government funded to establish rice fields show a mixed result in continuation, after the initial pilot program has stopped. Some fields remain rice fields, while others cultivate other crops or are abandoned. Perhaps the nonindigenous inhabitants of Siberut Island would have been inclined to grow rice as their cultural routine include rice cultivation and consumption, but for the general population without financial assistance sago remains the easiest to harvest. This is perhaps due to the fact that Sago is very suitable to swamp like areas, and doesn't suffer from extended periods during the rainy season when the rivers and creeks flood the sago groves. If *padi* or rice seedling fields are covered for more than a week, harvestable *padi* quantities will be significantly reduced.

In Muntei village which is a settlement created by the government for the indigenous Mentawaians there would be only very few who would not favor the taste of rice. Although no one has experienced rice cultivation while sago groves are within a half an hour stroll from Muntei or with many more in their original *uma* domain [4]. The primary reason why rice would not be cultivated in the village is the agricultural tradition. Secondly, it is perceived as difficult to manage a growing process in the swampy parts where the sago grows unaided and unhindered at the back of their village. Thirdly, the unfamiliarity of handling pesticides or herbicides as this is not required in maintaining the sago groves.

Thus, remains the question why do many Mentawaians in the village still value rice as being superior or more prestigious than sago? The answer could be perhaps that broad speaking rice has a perceived high-status value. The rice consumption in Mentawai is not solely viewed from a nutritional perspective. It has a connotation of affluence, a perceived luxury food and perhaps valued as being modern and a sign of development. It can perhaps be equated to the Indonesian urban consumption trend to consume instant noodles or burgers.

Sago has been for many designated to be in the primitive range of foods, eaten mostly by remote communities such as the Papuans, upstream Dayak or by populations on Pacific Islands including the Moluccas. Secondly, Mentawaians who traveled to the mainland noticed that sago was rarely eaten by either, the Padang urbanites or the higher educated in the main town of Muara Siberut. It is for certain that in very few places sago is the go in Indonesia. This perception is also re-enforced by the government funded Family Food Supplement Program such as *Beras Sejahtera* (Rastra) previously known as *Beras Miskin* (Raskin). It has to be noted that the central government has already announced that this program will be discontinued in the year ahead, due to recognized limitations of the program.

### IV. MENTAWAI FOOD DISTRIBUTION

In the Mentawai district, the Rastra program was not focused to supply local economically challenged families with additional sago as what could be expected being sago the main staple food. Instead, a low-grade rice was provided to the ones who were perceived in need of additional food. Possibly unintentional, a negative social signal of local sago food was indicated when the financially challenged are supplied with "extravagance" styled food. The social re-enforcements have steered Mentawaians to believe sago, bananas and taro have inferior or nutritional qualities. The kind of humbleness attached to their traditional staple food makes it problematic to show this as a part of their quality island food, especially when the guests are *sasareu* or non Mentawaians. The reduced social value has affected to some degree the customary gift exchange of food that could also include an act of reciprocity, an important element of social and economic relationships among peoples [5]. This was also understood by the former regime of Suharto who saw a government control over the rice distribution supply and growing as an important element to stabilize his tenure in office.

It must be noted as a part of the rice distribution program and sago yields and consumption that firstly, sago grows in Mentawai prolific without the use of chemical controlled agents or fertilizers. Secondly, subject to variations in local conditions and sago palm specimen, but it has been noted that sago palms could have a potential yield of up to 25 tons of starch per hectare per year. In other words, sago starch yield per unit area could be about 3 to 4 times higher compared with rice, corn, or wheat. Compared with cassava, sago has a starch yield about 17 times higher than cassava [6].

### V. FIELD RESEARCH

In 2009 field research commenced in Mentawai and was followed up in 2013 and 2017 with different research directions. In the community visits, an interesting revelation was encountered regarding the social connectivity of rice and sago. For several months a modified longhouse was shared in Muntei with a family. This enabled to observe their daily family routine and obtain a better understanding of the social life on a daily basis. Every day, sago was consumed with the

usual complementary condiments for midday and evening meals. In the morning a variety of small snacks were consumed, including cooked bananas, taro, tubers and cassava. It was the habit in the *uma* to have the main lunch and dinner shared together at the back of the traditional Mentawai house, near the kitchen. This situation relating to the way of traditional cooking or the process of roasted sago. It is best served when it is just roasted and hot. Cold roasted or cooked sago is less palatable and quickly becomes difficult to chew. To make things simple it is easier for the family to sit on the floor in the kitchen and enjoy their food while the fire in the kitchen is still going.

When I was in Siberut, I was often invited to share a meal with the family. This could be in their *lalep* or individual house or in the *uma* when gathering with other members of the clan. The hosts were very happy to invite me to have food together as this is a part of their culture. Perhaps they would indicate to have rice and perhaps some fried fish. Perhaps in another situation people in the village would indicate for me to buy rice in the store and they would take care of the other ingredients to make the food tastier. The youngsters would feel proud and tell their friends of their rice consumption earlier in the day. On occasions like this, they wish to let visitors or *sasareu* know they too prefer to consume rice. As rice consumption is relatively high, especially during *musim anggau* when the high wave in the Mentawai straights can interrupt the supplies from the mainland. In general Mentawaians in the Siberut interior feel happy when rice is part of their menu, especially for the youngsters, in a show off to their friends. Thereby, serving rice to guests is now considered to be more courteous, and a sign of being honored by their presence. It seems that over the years the social etiquette of honoring guests no longer fits well with sharing a sago meal. Several informants shared the same opinion on the consumption of rice in Mentawai.

#### *A. Common Grounds, Cooperation and Sovereignty*

Sago palms proliferate due to the abundance of rainfall, the water retention capacity of the soil and undulation of the landscape around Muntei village which is similar in other parts of the island. In addition, which is very important due to its virtual low requirement of human resources a minimal maintenance regime to advance sago palm growth. At this point in time, there are no effective pesticides or herbicides known that would increase the yield of sago palm trunks significantly. On the contrary, if pesticides were to be used, it could hurt the much-desired sago larvae (*Cerambycidae* of the genus *Rhyncophoros*) to breed. The sago grubs are a food delicacy that feeds mainly on waste parts of the tree and the tree stumps that remain when the palm has been harvested [7]. As sago is mostly carbohydrate, and the sago grub mostly protein and fat, they are complementary in nutrient to create a relatively wholesome Mentawai diet. The grubs are relatively easy to collect and often shared around when someone has gathered a small bucket load from the palm stumps. From a balanced diet perspective, the harvesting of the larvae is extremely useful when fishing is not possible. During the season when the sea is rough with high and dangerous waves, no one goes out to sea. The stormy weather virtually prohibits the launching of their tiny dugout canoes.

After cutting down a harvestable sago tree, there are always small saplings in the vicinity that will grow and take its place. A sago sapling needs about 10-12 years to mature before it is fully mature to be harvested. Normally, one good mature sago tree can yield sufficient sago starch for a family of 4-5 members, for about 8-10 weeks. This is possible because a whole trunk of processed moist, clean starch will not spoil for many months, if stored with care in a *tapri*. A *tapri* is a storage container, made from the sago leaves and handy to carry the harvested sago starch in.

A harvested palm will produce about half a dozen good sized *tapri*, as approximately 60 percent of the trunk contains harvestable starch. Nevertheless, depending on the efficiency of the harvester and condition of the palm tree, the recovery rate of the starch can be as low as 25 percent [6]. All parts of the tree are used; from the leaf to the larvae or grubs of the beetle family that proliferates on the remaining starch remaining in the stump, after the palm has been cut down. The grubs can be harvested several times till the stump holds no further foodstuff for the beetle to lay its eggs there. The beetle will then seek other places in the sago forest. A *tapri* that holds the freshly damp stored sago flour, has the appearance of a green cylinder-shaped log approximately half a meter tall and is normally positioned in a cool protected place in the *uma*, covered with cloth. By tradition, the process of collecting the sago starch is carried out at the same location or close to where the tree is felled. The equipment for harvesting is very basic. First, a large axe is needed to fell and split the tree. The second stage requires a chopper or small hoe, to lift the pith or starch from of the trunk. The third stage requires a large sieve, to be able to separate the palm fibers from the starch. By washing the raw fibers and attached starch with water above the sieve on a raised platform, the starch is released. It is collected in a dugout canoe below the raised platform that has been taken to the harvest location. The wet dislodged starch settles quickly to the bottom of the dugout canoe, and the excess water overflows from the canoe back into the creek, or can be reused to wash the next batch of raw starch and fibers. The remaining fibers are spread around the sago grove and act as compost to fertilize the next stand of sago trees. When the canoe is filled with wet starch, the leaves of the felled sago tree are arranged to make the *tapri*. The sago starch appears as a white wet coarsely ground grainy flour and feels like a clean coarse mud. The harvest is packed inside the cylinder like woven container made of sago palm leaves on location. The heavy *tapri* is carried home like a backpack. Often, a harvested sago tree might be shared by 2 to 3 families who take it in turns to fell a sago palm together.

The most popular way of preparing sago is by cooking it in freshly cut 50-70 centimeters long bamboo canes. The chambers of the bamboo are filled with sago starch and directly roasted on the fire for 20-30 minutes, depending on the size and heat. When it is cooked, the hot black roasted canes are taken from the fire, and the charred bamboo sections split easily. The hot doughy bread-like sago chunks are taken from the bamboo, and dipped into a condiment of spicy or salty vegetables, or meat or fish, and provide a substantial tasty meal. There is also a quicker way of roasting them, but for this type of preparation sufficient sago leaves, and nimble fingers

are required. The preparation is as follows; a batch of damp sago is mixed with a little bit of freshly grated coconut, and sprinkled on an 8 to 10 centimeters wide sago leaf. The sago leaf, topped up with a filling of raw sago pith, is skilfully twisted around to make a slim stick about 30 centimeters long and 3 centimeters in diameter, in a curled shape. These sticks, roasted at the back of the fireplace and periodically turned to cook evenly, produces a nice crunchy sago delight, ready to be unwrapped. This second variety of sago preparation is especially favored, when eaten hot in the morning. The sticks do not require any supplementary condiments. It is customarily consumed with a small glass of coffee or tea.

Besides a useful food source, the sago tree provides several other economic benefits to the community. Sago leaves are used to make one of the sturdiest thatched roofs, or wall material. They are useful wrappers for roasting sago sticks or manufacturing of *tapri* containers. In addition, the strong sago palm bark can be used for flooring material, and as a fuel that burns well in the kitchen fire-place. Parts of sago trees such as the crown, which do not contain starch, drop to the ground and together with other tree litter become compost. Old tree trunks become a host for the sago beetles mentioned earlier. This makes the sago palm a valuable multipurpose economic plant which increases their food and community sovereignty.

## VI. DIVERSITY OF CASH CROPS

To increase the farming base of Mentawai communities beyond growing nutmeg (*Myristica fragans*), cloves (*Myrtaceae*), areca nut (*Areca catechu*) and rubber (*Hevea brasiliensis*), the local office of the ministry of agriculture has assisted in the introduction of several cash crop commodities, including cacao (*Theobroma cacao*). Many planted cocoa fields can be seen around the village, while more areas where sago used to be grown in abundance, have been cleared to make way for cash crops. It has been signalled by some that those crops often have caused a degree of deforestation [8]. Nowadays, if someone wishes to fell a sago palm and don't own a palm in the nearby sago grove, a possibly short hike from the settlement is required to the nearest spot of their *uma* domain to harvest a palm. The sprawling cacao and rubber have displaced some of the nearby sago groves and occupy a lot of agricultural land near the as well as further afield from the settlements. The farmers can sell their dried cacao beans, areca nuts, or rubber to the local traders in the village, or try and obtain a better price from the larger traders in Muara Siberut who also sell other foodstuff and household items needed by the farmers.

## VII. DISCUSSION

The prices of the cash crops are subject to fluctuations and do not follow the ups and downs of rice prices which are subject to different pricing cycles. The rice supplies, mostly originate from the mainland. Generally, the rice is shipped from Padang, the nearest mainland harbor. During the rainy season, especially in July till October when storms often occur, the supply can be disrupted, but it's likely not to affect the

availability of rice these days. Nevertheless, it is a reminder of how staple foods, that used to be available within virtual arm's reach, is becoming more and more a commodity of trade instead of being in backyard reach. In response to food scarcity experienced in some remote regions in Indonesia, it would be prudent for local government institutions to encourage and support village food traditions, instead of discounting their value. Several reports have noted that sago, taro and cassava are grown with little human interference to mature, compared with rice, which is labor intensive from the planting to harvest, and includes a strict regime of pest control and soil fertilization [6]. Government health authorities and their nutritionists could be deployed to dispel a general myth that sago is a poor choice staple food option [9]. Although the protein level is somewhat lower than rice, this could be easily resolved by complementing the diet proportionally with suitable additions. Cash crop cultivation, to be able to purchase staple foods can be risky if no other ready staple food substitutes remain available. In current cash crop cultivation situations, communities may be unaware that their crop is subject to price cycles of global markets. For instance, a bumper crop of African cacao can lead to a slump of the local price in West Sumatra, while a cold snap in South America can lead to higher cacao prices in Mentawai. In regards to housing, further relocation of communities into settlements has often lead to a loss of forest skill capacity, therefore if former skills can be incorporated into modern life, the chances of success can come from several directions [10]. From a social perspective, the results of a development plan will possibly outlive the term of governance or maybe the term of a generation [11], therefore changes ought not to be put in place with the expectation of generating results in yearly, or in political term basis [12].

## VIII. CONCLUSION

It is possibly still a long way off before sago will lose its social value in the community. In the traditional rituals lead by the shaman or Sikerei, the villagers in Muntei require sago. Besides, the experience of eating roasted sago with a sprinkle of coconut beats any breakfast cereal or rice for many. It is understandable that through times, desires and needs have changed. Something new often has an appeal and ought to be tried to be experienced. Even though roasted sago is black, which by some means tainted or dirty, many are proud of this useful, practical, and versatile serving of food. Fortunately, Mentawai has been endowed with natural resources that allow a change of housing, connect with others or change food consumption patterns. Those changes incorporate a sense of luxury for the Mentawai people, and a possibly successfully change to a new paradigm of life. Recently introduced regional autonomy has given additional homegrown opportunities, for a combination of old and new perspectives in the establishment of a blended Mentawai identity. This success will gather cross-cultural experiences while new economic conceptual fine-tuning takes place, to create a greater sense of wellbeing. However, the value of the past ought not to be completely discarded, as it can be useful to be kept in mind in terms of future endeavors and nostalgic longings. Social sustainability is also about connecting to future sources of food stocks, as well as increasing food know-how by retaining the old. Awareness

of food production increases knowledge of agricultural diversity, and the planting of diverse cash crops may minimize dependency on outside aid or from government or institutions. Food sovereignty remains an important element of concern in Mentawai. The government initiated developments that have expanded over the years, have at times created new problems on Siberut that required going back to the old trusted ways. Colantonio and Dixon remarked that policy efforts that are inclusive of local desires are building blocks for a more lasting social sustainability in communities. Local cultural and desires that are inherent to the Mentawaian setting remain an important component of sustainability.

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