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The Role of Rattan in the Economy of Orang Asli Communities

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ABSTRAK

Artikel ini cuba membincangkan kepentingan rotan dalam kegiatan ekonomi beberapa kelompok Orang Asli. Sebenarnya kegiatan mengeluarkan rotan untuk dipasarkan telah dilakukan oleh Orang Asli hampir satu abad yang lalu. Kini akibat peningkatan permintaan untuk bahan tersebut, kegiatan mengeluarkannya menjadi berleluasa hingga mengakibatkan kepupusan. Bagi Orang Asli mengeluarkan rotan bukan sahaja membolehkan mereka mendapatkan wang apabila bahan tersebut dijual, tetapi ia juga membolehkan mereka memperoleh kredit daripada orang tengah. Di samping itu kerja mengeluarkan rotan merupakan satu alternatif pekerjaan apabila tugas-tugas lain tidak boleh dilakukan. Hasil jualan rotan ini digunakan untuk membeli pakaian dan barang-barang keperluan lain. Demi mengawal rotan daripada mengalami kepupusan dan sekaligus menjejaskan ekonomi Orang Asli, perlu adanya langkah-langkah seperti mengenakan cukai eksport yang tinggi, menanam semula rotan, mempertingkatkan penggunaan rotan yang mudah biak serta mewujudkan sistem pasaran bagi barangan rotan hasil Orang Asli. Ini supaya kepentingan ekonomi Orang Asli berkaitan bahan ini dapat dilindungi dan sekaligus menguntungkan negara.

ABSTRACT

This article discusses the importance of rattan in the economic activities of some Orang Asli groups. The Orang Asli had been involved in rattan collecting for almost a century. As a result of increasing demand the activities have escalated resulting in the extinction of certain rattan species. For the Orang Asli rattan collecting is not only a source of income for buying clothes and other essential goods, but also enable them to obtain, interest-free credit from the middlemen. Besides, rattan collecting can be an alternative form of work when they are unable to engage in other types of work. The income from the sales of rattan is used to buy clothes and other necessities. Steps must be taken to safeguard the rattan from extinction as well as the economic interest of the Orang Asli.

INTRODUCTION

Rattan are palms, which climb by clinging tenaciously to other plants by backward pointing hooks on whips from their leaf tips or leaf sheaths. Their stems, once stripped of the thorny leaf sheaths, are strong and pliable. Species with a glossy outer surface are aesthetically beautiful.

Rattan are a characteristic feature of Malaysia forests. Not only are they common, they are also diverse with 96 species in 7 genera recorded from Peninsular Malaysia alone (Dransfield 1979). The Orang Asli (indigenous people) have been using rattans since time immemorial for a diversity of uses, such as cordage, weaving baskets, making fishtraps, for thatch, handles of axes and parangs, as well as many minor uses (Ave 1985). They are able to recognise and name the majority of rattans they encounter as well as knowing their properties and what they are best used for. For village use, they are gathered from the surrounding forest as and when the need arises and the abundance of rattans exceeds their personal needs.

For more than a century there has been a demand for rattans by the outside world and so rattan collecting has been a source of income. The entire commercial supply of rattan in Peninsular Malaysia presently comes from the forest and it is the most important minor forest product on which the Forest Department levies a royalty. In times past, *rotan semambu* commanded the highest price when Malacca canes were the fashion (Burkill 1966), now it is *rotan manau*, the prime rattan for furniture making, that commands the highest price and is under the strongest collecting pressure.

Traditionally, 90% of rattan exported went to Singapore for processing before being re-exported, mainly to Taiwan for furniture making. By comparison, the local furniture market is small and conservative in the rattans it uses (mainly *rotan manau* and *rotan segar*).

The increasing export market has led to an increase in the rate of collection of rattan and this, coupled with clear-felling of forest for land schemes and forest drowned by dams, is putting great pressure on this natural resource. When Indonesia banned the export of unmanufactured rattan, demand for Malaysia rattan rose to the extent that in some areas the volume of rattan bought by the middleman increased four-fold. Since Malaysia has now greatly increased the export tax on *rotan manau*, the volume handled has fallen but is still double what it was ten years ago.

The question that must then be asked is: Can the natural rattan populations sustain the current rate of collecting? If not, and the populations of rattan are gradually depleted until rattan collecting is no longer available to the Orang Asli as a means of earning a living, how will this affect the economy of Orang Asli communities?

This survey was therefore carried out with two objectives in view:

1. to assess the current supply of rattan in logged and unlogged forests by asking Orang Asli and middlemen their experience of whether populations in the forest were stable or diminishing, and
2. to assess the relative importance of rattan collecting in Orang Asli communities as a source of income. If it is indeed significant, then it is clearly important that rattan should be harvested at a sustainable rate rather than being exhausted in the short term.

METHODOLOGY

This study was based on a questionnaire designed to ask Orang Asli about the rattan they collect (for sale or for their own use), their opinions on whether the supply of rattan is easy to get or is diminishing and the relative importance of rattan collecting as a source of income.

Another survey asked the middleman about the Orang Asli they dealt with for information on the types, quantity and prices of rattans they dealt in. Their opinion was also sought on the sustainability of the supply of rattan.

Orang Asli groups were chosen to cover as many language groups and states as possible (Table 1). Groups were chosen who had in most cases previous contact with anthropologists so that rapport could be established more quickly.

The survey, carried out in 1988, was aimed to obtain a broad view of the national situation rather than an indepth view of any one group. The questionnaire was conducted over a period of three to four days in each village using Bahasa Malaysia (Malay) as the medium of communication. (This proved unsatisfactory with the Temiar in Kuala Betis). Mainly third year anthropology students were employed but several postgraduate students (Juli, Tan, Noland and Ramle) conducted the survey on the community they were studying for their higher degree.

The quality of the results predictably vary ranging from excellent to minimal. The information between groups is therefore not always comparable as is seen, for example, from the number of names of rattans recorded (Appendix I), for while it does reflect cultural differences between Orang Asli groups, it also reflects differences in the ability of the students.

Nevertheless, it has been possible to obtain a broad view of the importance of rattan to Orang Asli communities, the rate of collecting rattan and its future as a sustainable resources.

TABLE 1. The Orang Asli groups interviewed

Group	Village	State	Recorder
Batek	Kuala Atok	Pahang	J.P. Nolan
Che Wong	Lanchang	Pahang	Tan Siew Bee
Jah Het	Kuala Krau	Pahang	Ahmad Nazri Zainai & Razali Mudin
Orang Hulu	Kampung Peta	Johor	R. Kiew & Kiew B. H.
Semai	Ulu Kampar, Gopeng	Perak	Juli Edo
Semai	Pos Menson, Cameron Highland	Pahang	Samsor Junet & Miskani Hamzah
Semai	Pos Tlanok, Cameron Highland	Pahang	Samsor Junet & Miskani Hamzah
Semaq Beri	Ulu Jabor, Kemaman	Trengganu	Ramle Abdullah & Zulkifli Sulong
Semaq Beri	Sungai Berua, Kuala Berang	Trengganu	Ramle Abdullah & Zulkifli Sulong
Semelai	Tasik Bera	Pahang	Samsor Junet & Miskani Hamzah
Temiar	Kuala Betis	Kelantan	Samsor Junet & Miskani Hamzah
Temuan	Parit Gong	N. Sembilan	Mokhtar Husin
Temuan	Donglai Baru	Selangor	Mokhtar Husin & Zulkifli Sulong
Temuan	Sg. Temong	Selangor	Mokhtar Husin & Zulkifli Sulong

TABLE 2. Middleman interviewed

Client Groups	Town	State	Recorder
Che Wong	Lanchang	Pahang	Tan Siew Bee
Orang Hulu	Kahang	Johor	R. Kiew & Kiew B. H.
Semai	Ulu Bertam	Pahang	R. Kiew & Kiew B. H.
Semaq Beri	Kuala Berang	Trengganu	Ramli Abdullah & Zulkifli Sulong
Temiar	Kuala Betis	Kelantan	Samsor Junet & Miskani Hamzah; G. Davison

WHY COLLECT RATTAN?

From this study, it became apparent that there are three main reasons why rattan collecting is important in Orang Asli village economy:

1. it is the only way that they can obtain credit (interest free) with an assurance of repayment
2. it can be carried out at times when other ways of earning a living are not available, and
3. it gives a reasonable monetary return for effort expended

In addition, in two communities it allowed them, with the help of the middlemen, to acquire motorcycles (Temuan, Selangor) or an outboard motor (Batek), which were paid by installment from subsequent rattan collecting trips.

Evidence for the first reason is perceived from data on advances that are given on request from the semi-middleman (*kepala*) or the middleman. Small loans (about RM50) can be gotten when the need arises, e.g. in the event of sickness or during the rainy season when rubber cannot be tapped, and the Orang Asli can feel confident that he has a chance of repayment. This compares with credit from a sundry shop, where the chances of repayment are very low because there is no surplus from their normal budget. In one case, with the Orang Hulu, the middleman also acted as a savings bank giving them interest on what they deposit with him.

Evidence for the second reason is obtained from the timing of rattan collection. For example, groups with seasonal agriculture only collect rattan during the off season. For the Temiar, and the Semai at Cameron Highlands, where swidden agriculture, (shifting cultivation) is still practiced, rattan collecting only takes place after the harvest of hill rice and before the next clearance of *ladang* (field). For those whose main income is rubber tapping, rattan collecting maintains their income when they cannot tap rubber e.g. during the rainy season, or when the yield of rubber is low, e.g. when rubber is deciduous.

Evidence for the third reason is seen from their choice of activity for monetary returns. All groups of Orang Asli consider rattan collecting as arduous work (*sangat berat*), involving effort to climb tall trees to cut the rattan free and to carry the heavy canes out of the forest. If they can get as good or better returns with less or equal effort, then they will change from rattan collecting to, for example, collecting *durian* (*Durio zibethinus*) or *petai* (*Parkia speciosa*) or tapping rubber.

In addition, Orang Asli apparently prefer activities that yield a known monetary return and one that follows immediately from the effort expended, such as rattan collecting where the contract fixes the price

beforehand and payment follows immediately after a 3-15 day collecting trip; or *petai* or *durian* collecting where they can sell their fruits direct to the public by the roadside or rubber tapping where the price is fixed and is more or less stable. This compares unfavourably with planting crops of fruits for the local market, such as maize, bananas or *rambutan* (*Nephelium lappaceum*), where not only is there an interval between effort expended and monetary return, but they cannot control the selling price to the middleman from outside and they often feel that they get less than the market price.

On the whole, even the settled Orang Asli communities live more or less at subsistence level, their regular income scarcely being sufficient to make ends meet. As Gomes (1986) had shown, the Semai have a good idea of the value of money and, except for the two groups who still plant hill rice, they prefer to work for money and buy their rice rather than planting it themselves. In addition, they need money for food (sugar, salt, coffee, tea, cooking oil etc.), household items (pots and pans, crockery etc.), cigarettes and items such as clothes, *parang* (jungle knives), nylon fishing lines and hooks, batteries and torches. In addition, there is a trend in all groups to prefer things that can be bought to those that can be made; for example cheap plastic items are preferred to baskets made from rattan and white bread and biscuits are bought rather than made by them.

As the Orang Asli are encouraged to live in settled communities they come into more contact with the outside world, which has stimulated their desire for consumer goods such as radio-cassettes and motorcycles. Hence their need for money has correspondingly increased.

THE ECONOMICS OF RATTAN COLLECTING

The number of people in a village involved in collecting rattan depends on two factors: (1) the availability of rattan and (2) other means of earning a living.

If rattan can be had close to the village, all villagers can collect, including older men and women. If rattan is plentiful and is easy to obtain a good return, then more villagers will also be involved. Otherwise, it is mainly the younger men who make up the groups to go rattan collecting.

As mentioned earlier, if other means of earning money are available, which give better returns or are less arduous, then villagers will not collect rattan.

This is clearly illustrated by two Temuan villages not ten miles apart, where one grows rubber (each villager has 8 acres) and the other has no

rubber (Table 3). Although rubber tapping is not lucrative (RM10-15 a day that they obtained was above the income for other areas with older rubber holdings, which were not weeded or fertilised and where the Orang Asli said they got only between RM5-10 a day), it is easier work than rattan collecting and most villagers tapped rubber in preference to collecting rattan. In the other village, which has no rubber, 88 per cent of the villagers (i.e. almost all the ablebodied) collected rattan full-time taking only a few days rest each month.

TABLE 3. Occupation and income for two Temuan villages in Selangor

Occupation	Income (RM a day)	Villagers Involved (per cent)	
		Sungai Temong	Donglai Baru
Rubber tapping	10-15	none	most
Rattan collecting	15-20*	83	10
Daily paid workers	5-18	17	1
Minor forest products#	5-25	none	5

* RM15-20 is the estimate given by the Temuan, actual figures from trips from RM5-25 with an average of RM14 a day.

collecting bamboo, banana leaves and butterflies.

For the Semai and Temiar who still carry out swidden agriculture, rattan collecting is the full-time occupation for the majority (85 per cent) of the villagers for the three to four months between rice harvesting and preparing the ladang. For the Batek, Semaq Beri (Kuala Berang) and Temuan (Sg. Temong) communities full-time rattan collecting involve most villagers (up to 88 per cent) and about half of the Orang Hulu community. Even for the Semai (Gopeng) and Temuan (Parit Gong and Donglai Baru) who have well-kept rubber smallholdings and can boost their income by the sale of fruits, in particular *durians*, there are still about ten per cent of the villagers who collect rattan regularly or full time.

Actual income from rattan collecting is difficult to assess because it depends on the number of days worked in a month, availability of rattan, type of rattan collected and the industry of the individual. (For the latter there is usually a four-fold or even five-fold difference in the quantity of rattan collected).

Rotan manau commands the highest price (RM2-3 per piece) and many pieces can be obtained from a single plant. In areas where *rotan manau* is abundant, earning in the region of RM30 a day can be made. For the lower priced canes, such as *rotan mantang* or *sega*, the amount that can be made depends on the availability of the rattan and how hard

the collector works. In rattan-poor areas in Selangor, the Temuan can make between RM10-20 a day, compared with areas where rattan is more abundant (e.g. *rotan sega* in Johor and *rotan mantang* in Pahang) where RM20-30 a day can be made.

Calculating from figures obtained from several trips and knowing the number of trips a year gives a rough annual income of between RM400 and RM600 for those who collect rattan part-time and between RM750 and RM4,680 for those who collect rattan full-time. The highest figure is for those who collect *rotan manau* from virgin forest.

Although an annual income of RM750 and RM4,680 works out at a daily income of RM2 and RM13, the Orang Asli do not see income from rattan collecting in this light. They certainly would not consider working for less than RM5 a day on a daily paid basis. For them, collecting rattan gives a lump sum of a minimum of RM50 but usually of several hundred dollars after one to three weeks work, enough to settle outstanding loans, buy food for immediate needs and have some left over. Rattan collecting is therefore regarded as a reasonable form of work. In comparable terms, it pays as well as rubber, but most regard it as harder work.

Table 4 shows that rattan collecting is still an important means of earning a living for all groups of Orang Asli, except the Semai (Gopeng) and Temuan (Parit Gong and Donglai Baru), who have well-kept rubber smallholdings and can boost their income from the sale of fruits, in particular durians. In areas where there is a ready market, selling durians gives a good income and the work is not arduous. The durian trees are in forested areas but were planted or are owned by individual Orang Asli. There are cases where between RM1,000 and RM4,000 can be made by an individual in a single season. Petai collecting, which they sell for about RM18-20 for 100 pods, is also a preferred activity considered less arduous than rattan collecting. (It is nevertheless a dangerous occupation as the risk of falling from the tree is very real).

The forest is also a source of many other minor products, some of which can yield a good return for the effort expended and for some communities form an important component of their income (Table 4). These include:

- (a) Incense wood (*kayu gaharu*, *Aquilaria malaccensis*). All rattan collectors keep an eye out for *kayu gaharu* trees. However, it is a matter of chance whether the tree encountered yields fragrant wood. If such a tree is encountered then rattan collecting is abandoned as it is more arduous and less lucrative work. Currently the price of *kayu gaharu* is high, the market price for Grade A ranges from RM200-300 per *tahil*. However, the price the Orang Asli receives is much lower and varies, e.g. for Grade A RM20 and Grade B RM3-4 (Batik) ; for

TABLE 4. Sources of income in Orang Asli communities

Group	Village	Source of Income		
		Major	Other	Minor
(a) Villages with rubber smallholdings				
Jah Het	K. Krau	rubber	rattan collecting	bananas
Semai	Gopeng	rubber, durian	rattan collecting, petai	forest
Semaq Beri	Ulu Jabor	rubber	rattan collecting	cultivated fruits*
Semelai		rubber	rattan collecting	?
Temuan		rubber	rattan collecting	—
Parit Gong			cultivated fruits*, durians,	petai
Temuan		rubber	rattan collecting,	forest
Donglai			durians	products#
Baru				
(b) Villages without rubber smallholdings				
Batek	K. Atok	rattan collecting	—	blowpipes
Che Wong	Lanchang	rattan collecting	?	?
Jah Het	K. Krau	rattan collecting	?	?
Orang Hulu	Kg. Peta	rattan collecting	forest products#	durians
Semai	Cameron Highlands	rattan collecting, durians	—	bananas
Semaq Beri	Kuala Berang	rattan collecting	—	bananas
Temiar	Kuala Betis	rattan collecting	—	—
Temuan	Sg. Temong	rattan collecting	—	—

* cultivated fruits include coconuts, papaya, banana, jackfruit, rambutan and pineapple

for details of forest products, see text.

Grade A RM30-40, Grade B RM20-30 Grade C RM10-15 (Temuan). Most rattan middlemen also deal in *kayu gaharu*. Apart from the excitement of finding a tree, the annual addition to income is small, e.g. the Semaq Beri reckoned they got about RM100 a year, rarely RM300.

- (b) Bamboo is in demand for incense sticks (Selangor) or for vegetable baskets (Cameron Highlands). In Selangor, mature bamboo poles sell for 80c per 13 foot pole and an income of RM20-25 a day can be earned.
- (c) Banana leaves for making Malay cakes (Selangor) sell for 6c per undamaged leaf and a daily income of RM15-20 a day is reported.

- (d) Frogs (Johor) sell for RM7 a kati (600 g), if bought in the village and RM10 a kati if sold to shops. Exceptionally 20 katis of the Malaysian Giant Frog can be caught in a single night during the dry season.
- (e) Honey of the Giant Honeybee is sold for RM250 for 4 gallons (a large biscuit tin) by the Batek or RM40 a kati by the Temuan at Sg. Temong. Honey collecting is very hazardous work and several deaths occur each year from honey collectors who were either badly stung, or let go their grip of the branch and fall a hundred feet or more to their death.
- (f) *Minyak keruing* (Dipterocarpus spp.) is now only collected by the Semelai at Tasik Bera. The oil sells for RM60-62 a 4 gallon tin and is destined for the cosmetic industry.
- (g) A variety of forest fruits are gathered for sale. The Semai at Gopeng sell *rambai* (*Baccaurea motleyana*) for 20c a kilo and *buah larah* (*B. macrocarpa*) for 60c-RM1 per 100 fruits.
- (h) *Ikan Kelesa*, commonly called arowana, is collected from the tributaries of the Endau River and sold to the aquarium trade. About a thousand fish can be collected in a single season and sell for RM50 each for golden arowana, RM30 for silver and RM10-15 for small ones.
- (i) Insect collecting (Cameron Highlands and Selangor) is easy work and is popular with children. There is an element of gambling in that the price of insects varies between 50c and RM50 an insect depending on the rarity and demand for a particular one. In Selangor butterfly collecting gave a daily income of about RM5-6.
- (j) Traditional medicines. The Malays in particular respect the effectiveness of Orang Asli medicines. Common medicines collected include *bunga pakma* (*Rafflesia hasseltii*) which is sold by the Orang Asli for 20-50c a bud in Gopeng; *biji jering* (*Pithocellobium jiringa*) is sold for 50c for 100 seed in Gopeng; and the Batek sell *akar tongkat ali* (*Eurycoma longifolia*), although they do not use it themselves. (Incidentally, scientific analysis has not shown any of these plants to have medicinal value).

In summary, even for those who tap rubber, rattan collecting is an important means of earning during periods when rubber cannot be tapped. For those who have no rubber it is the main and certainly their only reliable source of money. In addition, for any villager it is a means of obtaining a loan and/or a lump sum of money within a short period of time. It is a means of tying them over during times of need e.g. if the durian season is poor, or if they are ill.

Rattan collecting is therefore an essential part of the economy of Orang Asli villages as rubber tapping and settled agriculture in general

does not yield sufficient income to maintain the family throughout the year. Furthermore, opportunities for alternative work close to the village are few and are equally low paid. As one Orang Hulu said: *Habis rotan, habis Orang Asli* (no rattan, no Orang Asli), by which he meant that without rattan collecting the Orang Asli would become dependent on the government and would thereby lose their identity and culture.

RATTAN COLLECTING DESCRIBED

In all cases a verbal agreement is made by the middleman about the type of rattan to be collected, the price and the time to collect it. He often specifies the place of collection as he holds a rattan collecting concession from the Forest Department. In some cases the quantity is also specified, in others the middleman will take all they can collect.

In most cases, he deals with a particular villager (*kepala*) who organizes the group of rattan collectors. The *kepala* may or may not be the *batin* (headman). In any case, the middleman should pay respect to the *batin* by seeking his nominal permission for the villagers to go rattan collecting. The *kepala* takes a commission on the amount of rattan collected as does the *batin* although his is smaller. Among the Temuan the *kepala* plays a larger role being responsible not only for organising the groups of rattan collectors, but also choosing where they go, arranging transport and food for the trips and being responsible for the monetary advances and their repayment. Only in the case of the Che Wong do the rattan collecting groups operate without a *kepala* – the middleman can approach any villager.

For the Orang Hulu, Semelai and Temuan it is usual for the middleman to give a cash advance to cover the cost of their food for the trip and for their families while they are away. Some groups, e.g. the Che Wong, Semai and Semaq Beri prefer not to take an advance. For the Temiar at Kuala Betis, who are remote from towns, the middleman arranges all the supplies, which are subsequently paid for from the proceeds of the trip.

Except for the Batek on the Pahang River and the Orang Hulu on the Endau River, the middleman (or *kepala* in the case of Temuan) arranges transport to take the collectors to the forest. For collecting around the Kenyir Dam, they go by boat (often a 10-hour journey), but in all other cases they go by small lorry or landrover along logging tracks.

For short trips with one or two nights in the forest, the groups are small, 2-3 people. For longer trips of one or two weeks the groups are larger with between 5-20 people. The Temuan *kepala* manages groups of 30-42 people but he divides them among different areas. Some groups

(the Batek, Che Wong, Orang Hulu, Semai from Cameron Highlands, Temiar from Kuala Betis and Temuan from Sg. Temong) take their families with them on long trips. If the children are still small, the women remain in the temporary shelters to look after them, but if they are older, then they and the women can help pull down the rattan, cut off the leaf sheaths and carry the canes to the roadside.

Young boys follow their fathers to 'learn the trade' and it is a source of pride when they can earn money themselves and 'feel like a man'. Some girls also go to collect rattan. For these young people, the money they earn is spent on clothes and in the case of young men on entertainment as well.

Although they go as a group, once in the forest they split into pairs or individuals to collect rattans. They build temporary shelters to stay overnight as a group and move depending on the availability of rattan in the area. Usually the trips last between a week and a fortnight, rarely more than three weeks because the rattan spoils within three weeks to a month and then cannot be sold.

Most groups work from dawn to dusk (7am to 7pm), eating rice in the morning and night. The provisions they take are frugal: rice, cooking oil, tea, coffee, sugar and biscuits but always include cigarettes or tobacco. (Only the Temiar at Cameron Highlands grow their own tobacco which they roll in a forest leaf (*daun rokok*) to make a cigarette). Some groups take a blowpipe to hunt monkeys, squirrels, mousedeer and jungle fowl. They catch and eat tortoises they encounter and hunt for frogs at night. Sometimes the women may spend their time fishing.

The mens' time in the forest is spent searching for rattan. When once located, they climb adjacent trees to cut it free as high up as possible. Usually the tip part of the rattan is beyond their reach and is left in the tree canopy. Once freed, the lower part can be pulled down. The rattan is then stripped of its thorny leaf sheaths and the stem is cut into lengths.

The thick-stemmed species (*rotan manau*, *mantang*, *semambu*, etc.) are cut into 9 foot lengths. The thin-stemmed species are cut into 18-20 foot lengths, which are folded in two. Young stems (which are not hard), those that are badly bent or are damaged by insects or disfigured by wounds, are discarded as the middleman will not pay for them.

The lengths of rattan are then carried to the collection point, which is usually at the edge of a logging track. Carrying rattan is an extremely arduous work. For *rotan manau*, ten 9-foot lengths is a heavy load for a man. The bundle is carried on the shoulder. For smaller sized rattan, a bundle of 20-30 lengths folded in two are carried or dragged through the forest.

At the collection point, the canes are kept in the shade and are covered by leaves to prevent them spoiling in the sun. In all cases the canes are sold untreated to the middleman.

The middleman comes to collect the rattan by small lorry along the logging tracks. In the rainy season, it may be necessary to hire a logging lorry to get the rattan out (usually at a cost RM300 a day) if the road is slippery and the small lorry cannot get through. For the Orang Hulu, they take the rattan by river to their village where it is collected by the middleman. For the Batek, they take their rattan by boat down the Pahang River, a three to four hour journey, to the jetty at Kuala Tembeling, where they sell to the middleman's agent. Formerly, they hired a boat from a Malay, but now they have their own Johnson 65 outboard motor (supplied on credit from the middleman) and a boat given them by JHEOA, (Department of Orang Asli Affairs).

If the rattan is left untreated for about a month, it spoils and is worthless. There are two cases reported where this happened. The first occurred because the logging track was impassable even to logging lorries, so the rattan could not be taken out of the forest in time. The loss incurred was borne by the *kepala*. Slippery logging tracks impassable due to bad weather are a major drawback to collecting during the rainy season. However, for those whose livelihood is dependant on rubber tapping, the rainy season is one of the main periods when they collect rattan. For those who collect rattan throughout the year, they go out less in the rainy season citing falling trees as a significant danger.

In the second case, apparently because of licensing problems, a new middleman did not honour the contract and collect the rattan before it is spoilt. The Orang Asli were not paid, which made them very angry.

The grading of rattan is usually done by the middleman, though at Cameron Highlands it is done by the schoolmaster, an Orang Asli himself. The Orang Asli are paid cash on the spot, according to the quantity they have individually collected. Any loan or advance is deducted from the amount paid. If however, the loan or advance is more than their payment, the amount outstanding is carried over to the next time.

THE MIDDLEMAN

The majority of middlemen are Chinese, who have built a long standing relationship of trust with a particular Orang Asli group. In some cases, the rattan business has been handed down from father to son. Experience is not only advantageous in dealing with Orang Asli, but also in judging whether forest concessions are good for rattan collecting, knowing the different types of rattan, processing and grading them.

An interesting exception to the predominance of Chinese middlemen is a Malay retired sergeant-major of the Rejimen Senoi Prag. He is

married to a Temiar, and runs his rattan 'business' with the primary aim of seeing to the welfare of the Temiar in his area.

All middlemen interviewed were full-time in the rattan business, though they may also buy *kayu gaharu* from the Orang Asli at the same time. In the Cameron Highlands, the middlemen also processed bamboo and made vegetable baskets. They estimated that about 100 Orang Asli collected rattan regularly for each of them.

All middlemen said that payment to the rattan collectors was their major cost. Other costs included transport and the cost of processing and grading. Rather, few workers were employed in processing and handling rattan and even then only when work was available. These were either paid by piece work (between 8-18c for cleaning a piece of *rotan sega* with steel wool, for example) or by the day. There is about 5 per cent wastage of canes.

Capital investment included up to three small (3-tonne) lorries for collecting rattan, a landrover, the processing set-up and covered sheds (including a small office) for storing processed rattan. The processing and storage areas are quite remote from the nearest small town presumably because land prices/rentals there are lower. (Other capital investments by particular middlemen include a boat (for operating on the Kenyir dam) and road building to gain access to virgin forest (at RM5,000 a mile) in Cameron Highland.

The royalty paid to the the State Forest Department depends on the state. In Cameron Highlands the middlemen paid RM3,000 per 10,000 acres of concession as a deposit and no license was required by the Orang Asli; in Johore the royalty was RM 20-30 per 3-tonne lorry as well as a license held by the Orang Asli for the concession (but paid for by the middleman) of RM200-300 a month.

In most cases, the middlemen processed the rattan before selling it. For some this was a recent development. The middlemen in Johor had begun processing rattan just a year ago; in the Cameron Highlands the processing plant is not yet completed. Processing the raw rattan oneself can overcome the problem of rapid spoilage.

Although the middlemen sells the rattan at about twice what he pays for it, several estimated the profit margin was about 10 per cent once other overheads had been accounted for. With *rotan manau* the usual turnover was about 10,000 pieces a month. In Johor, where *rotan manau* is no longer available in quantity, about three 10-tonne lorry loads of *rotan sega* and other types of rattan were exported to Singapore every month.

Of the middlemen interviewed one (Cameron Highlands) dealt exclusively in *rotan manau*, for two others (Kelantan and Trengganu) *rotan manau* accounted for about half their trade, and in the last case (Johor) *rotan manau* formed only a small part of the trade.

An advance, either in the form of food or cash, is given only on request from the villagers (see above). Some middlemen prefer not to give an advance (e.g. in Cameron Highlands where, according to the middlemen if they were given money first, there would be no work done).

Processing of *rotan manau* and other large-sized canes involves boiling them in a mixture of diesel oil mixed with about 20 per cent coconut oil. The oil bath is a metal-lined brick structure rounded in cross-section heated from below by a wood fire. The length of time in the oil depends on the experience of the middlemen, some say ten to fifteen minutes but in one case the middleman said through experience with getting the temperature just right, a few minutes was enough and he knew when they were ready as the skin peeled off 'like frying fish'. After boiling, the canes are then rubbed off with sawdust and stacked in bundles in the sun for about two to three weeks until completely dry. Then they are stored under cover until sold.

Rotan sega needs to be cleaned with steel wool to make it shiny. Orang Asli women are often employed for this at a rate of between 8c (Kelantan) and 12-18c (Johore) per 18 foot cane. *Rotan sega emas* is naturally glossy and does not need scrubbing. It is bought by the middleman at a higher price, e.g. the Orang Hulu get 18c per piece for *rotan sega air* compared with 25c for *rotan sega emas*. These small-sized canes are then sundried before storage on a raised frame until completely dry.

Villagers also sell some types in a split form (*rotan belah*). The 18-foot piece of rattan is split longitudinally into equal-width strips and the inner part is pared away. This work is done by women in the village. A piece of *rotan ceriauis* cut into four strips. A Batek family can collect and split about five bundles a day. A bundle of a hundred of these strips sells for RM1.80. *Rotan setawar* is cut into 6, 8 or 10 strips depending on the size of the cane. A bundle of 100 strips sells for RM1.40. One commercial use of these rattan strips is for tying atap (palm thatch).

In most cases, the middleman sells between half to all his processed rattan to local (in state) furniture and rattan factories. However, the middleman at Kuala Betis sells his rattan to Kijang Mas co-operative, and Orang Asli co-operative, and the middleman at Kahang exports most of his direct to Singapore.

The recent increase in royalty on *rotan manau* (from 3c a piece to 66c in Pahang, for example) had not affected those middlemen who disposed of their rattan to local furniture makers. But those who sell out of state, presumably to exporters or who export it themselves, have had their volume of trade cut by the recent increase in export tax (by 50 per cent in Trengganu and by 65 per cent in Johor).

A GOOD MIDDLEMAN

To the Orang Asli, the attitude of the middleman is important. As a Temuan said: "Orang Asli tidak menghiraukan sangat harga tetapi tolak ansur seseorang itu yang menarik mereka" (Orang Asli don't put much weight on money, they prefer to deal with someone they like). They have a clear idea of who is a good middleman and one they would be happy to continue dealing with. In all cases, a good middleman is one who did not press them to repay their debts nor downgraded the quality of rattan collected thereby lowering the price. Repayment of debts is the middleman's biggest problem. Again his personal knowledge of each person is important to know how much to give and to whom. In Lanchang, most villagers can borrow RM50 and over several occasions up to RM120, beyond which it depends who the person is and whether he is likely to repay or not. The middleman of the Orang Hulu in Johor reckoned he was owed about RM10,000 in loans and advances.

With the Temuan in Selangor, where they are approached by several Chinese middleman, they prefer the one who is more appreciative in his approach. He will take them *nasi lemak* (a rice dish wrapped in a banana leaf) and drinks when they come out of the forest and has given them RM100 for a big village function like a wedding.

Where a long-standing relationship is built, the middleman is prepared to give larger loans to help buy a motorcycle or an cutboard motor, or save money for them with interest. The middleman in the Cameron Highlands built two roads about 20 miles long, which link several villages and the villagers travel free in his landrover. However, while he was in hospital one of his concessions was given to someone else who does not maintain the road. The Semai are hurt now that the middleman charges them RM3 to ride on his landrover to town, as according to them that is no way to treat a friend. (According to the middleman, if he can't recoup expenses for road building from rattan collection, he is not going to give them a free ride).

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This appendix lists the names of rattans used by the different communities of Orang Asli. The names were obtained by asking villagers to name rattans that were: (a) sold, (b) used in the village, and (c) others they knew. Spelling follows Malay pronunciation. (Hence 'c' is pronounced as 'ch' in English). The lists are certainly not complete, as a week's visit is far too short. Compare, for example, 27 names recorded by Ave (1985) for the Semai against 21 obtained during this survey. The number of rattans recorded depends to a certain extent on the rapport and patience of the recorder. This in part explains the low number of rattans reported for the Jah Hut and Temiar (Table 1).

Of the 140 Orang Asli names listed in Appendix I only 13 are shared by more than one group (Table 2). The few words (about 9 per cent) in common emphasises the distinct entities of the different of Orang Asli.

APPENDIX I. Names used for rattans by Orang Asli in the rattan trade

TABLE 1. Number of local names for rattans reported from Orang Asli communities

Community	No. names
Temuan	54
Semelai	29
Semai	21
Batek	12
Semaq Beri	9
Temiar	9
Jah Hut	9
Che Wong	7

TABLE 2. Names for rattans shared by more than one group of Orang Asli

Group	Rattan
Batek & Semelai	Ceriau
Che Wong & Jah Hut	Senia
Che Wong & Temuan	Sega badak
Semia & Temiar	besi, j(e)unjuk, tasung
Semai & Temuan	jelayan
Semelai & Semaq Beri	tawar
Semai, Temiar & Temuan	kanglang, manau tikus, tahteh
Semai, Temiar & Temuan	kertas
Semaq Beri, Semelai & Temuan	riong

Shared words between communities may be explained in some cases by contact between contiguous groups: as for the Che Wong & Jah Hut (1 word), Semai & Temiar (4 words) and Semelai & Temuan (4 words).

REFERENCES

- Ave, W. 1985. Small-scale utilization of rotan by the Semai in West Malaysia. Msc Thesis. University of Leiden, Netherlands.
- Dransfield, J. 1979. *A Manual of Rattans of the Malay Peninsular*. Kuala Lumpur: Forest Dept., Ministry of Primary Industries.
- Dunn, F.L. 1975. Rainforest Collectors and Traders: A study of resource utilization in modern and ancient Malay. *Monograph of Malaysia Branch Royal Asiatic Society*.
- Gomes, A.G. 1986. Things are not what they seem: Semai economy in the 1980s. A paper for Simposium ke-2, Kehidupan & Pembangunan Masyarakat Orang Asli di Semenanjung Malaysia. Universiti Kebangsaan Malaysia, 22-23 September 1986.

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