

KOKI MARKET IN PORT MORESBY

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ABSTRACT

Trading at Koki started on the beach where fishermen pulled up their canoes in order to sell their catch to townspeople. Apart from a period during the war, the Market has grown steadily. A Reserve administered by trustees was proclaimed in 1959. The powers of the Trust were increased by legislation in 1969, when the Trust was reconstituted.

The Department of Trade and Industry carried out two series of surveys of Koki Market in 1969-1970.

It was found that the quantity of produce offered for sale fluctuates considerably during the year, due largely to seasonal variations in rainfall in the areas supplying the Market.

The Kairuku and Rigo Subdistricts are the main sources of supply to the Market. There is some evidence of growing regional specialization in the production of certain commodities.

There has been very little change in prices between 1962-1963 and 1969-1970, although the availability of many commodities has increased considerably. Likewise there is little seasonal variation in prices despite marked fluctuations in the quantities available. This may be attributed to the use by sellers of collective bargaining in order to maintain prices at acceptable levels, and their willingness to leave produce unsold rather than lower prices.

Koki Market is peripheral to the market economy in that, with few exceptions, neither sellers nor producers are dependent on market sales for basic livelihood: in other words, they will not starve or suffer major inconvenience if they do not sell their produce.

Increasing monetization of the economy will probably induce the emergence of middlemen and specialized growers producing for sale at the Market. The attitudes to marketing, characteristic of the subsistence farmers who now form the majority of sellers at Koki, will then disappear.

INTRODUCTION

KOKI Market is the main selling place for indigenous produce in Port Moresby, and is also an important centre for indigenous social activity. The Market occupies most of the land known as the "Koki Market Landing Place and Recreation Reserve", on the shore of Walter Bay, about 2 miles east of the business centre of Port Moresby.

It is not possible to establish when trading first began at Koki. One of the earliest European visitors, who spent three months in Port Moresby in 1875-1876 and who described the area in some detail, made no mention of a

settlement at Koki (Stone 1880). An early missionary also made no reference to a settlement there (Chalmers 1887). It seems that, prior to the coming of the white man, indigenous settlements in the area were all on the shores of what are now known as Port Moresby and Fairfax Harbours.

Seligman (1910, pp. 92-95) described pre-contact trading in the Central District but did not mention Koki as a trading centre.

He wrote:

"By far the greater part of the Koita trade (the trade of the Motu was practically the same) has been water borne by the inhabitants of the coastal villages, from Toaripi in the Papuan Gulf to Aroma in the east", but

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that "markets, called by the Koita 'Wotogo', Motu 'utuka' are not held at the present day and never seem to have played any important part in the Koita economy."

The Papuan Annual Reports omit any reference to trading at Koki, but this is not significant as the Reports rarely described indigenous trading activities.

Koki was considered by officers of the pre-war Papuan service to be a "traditional meeting and trading place"¹ and trading has certainly been carried on at Koki Beach for many years. A reliable informant stated that when he first went to live at Koki in 1935, indigenous fishermen sometimes pulled their canoes up on the beach and sold their catch to the townspeople. This trade was discontinued during the war when the villagers from around Port Moresby were evacuated, and did not resume until about 1947 when the evacuees returned. The market was still an *ad hoc* affair, and supplies, especially of fish, were irregular, as few fishermen owned outboard motors or used imported fishing nets. It was not until 1949 that, in the words of one informant, "you could really call it a market".

In 1950, the then Minister for External Territories, Mr P. C. Spender, referred to Koki Market when he directed that "steps be taken to get rid of the unsatisfactory and dangerous waterfront area where canoes from up and down the coast traditionally anchor". It was later resolved by the Executive Council that "a sea wall be built, the area enclosed to be reclaimed, and that the area together with the small area along the beach on which coconuts are at present growing, be made into a park area for use by the public".²

A sea wall was built, but the work of reclamation still continues (January, 1971) and the area was not developed as a public park.

In 1951 Koki Beach was described as a "minor market where traders set up selling points, which we christened 'stalls' on the beach" (Belshaw 1952, p.26). There were usually four or five stalls, but sometimes there were only one or two and, on one occasion, 24.

In November, 1952, the Port Moresby Advisory Council appointed a subcommittee to consider and make suggestions concerning the establishment of a Municipal Market in Port

Moresby. The subcommittee submitted a report in January, 1953 and recommended that any one of three sites in the town be developed as a municipal market. It also recommended that "the Government Secretary be asked to build a market site in Coconut Grove at Koki...".

The Administration decided that the three sites recommended by the Advisory Council were unsuitable (no reason was given) and that the Koki site should be improved. £1,500 was allocated to build one or two sheds, to install a water supply, and to improve drainage. This work was duly carried out. The Market was placed under the control of the District Commissioner in Port Moresby and an overseer was employed to supervise the market.³

It was then discovered that the market site was not a native reserve as had been assumed, that the land had never been purchased, and was therefore still native land.

The Administration purchased the land from the Hohodae people in June, 1955. £640 was paid for 16 acres of land comprising the foreshore at Koki and Gabutu Motu Motu Island.⁴

In October, 1956, the Hanuabada Local Government Council applied for a lease of the land in order to control the native market and canoe anchorages and for Local Government Council functions. The application was withdrawn in 1957 on the advice of the Department of Native Affairs "until the future of the Greater Port Moresby Native Local Government Council is determined".⁵

In August, 1959, following a recommendation from the District Officer in Port Moresby, the market area was proclaimed as a reserve for native business and recreation with the District Officer and Assistant District Officer as trustees. The number of trustees was increased in 1962 and 1964 when Papuans were appointed.

In July, 1968, the trustees wished to borrow \$30,000 from a bank in order to improve the Market. However the reservation proclamation of 1959 did not provide acceptable security for a bank loan, and it was decided to revoke the reservation and declare a Trust by legislation.⁵

A Bill to this effect was passed by the House of Assembly in April, 1969, and new trustees were appointed. The Chairman *ex officio* is the

District Commissioner of the Central District and the other members are Mr Frank Griffin, a foreman mechanic, Mrs Stephanie Maino, a welfare assistant, Mr Dirona Abe, President of the Rigo Local Government Council, Mr Oala Oala Rarua, Member of the House of Assembly and Mr Willie Gavera, a Councillor on the Hiri Local Government Council.

In recent years the Trust has concentrated efforts on reclaiming land adjoining the Market and has considerably enlarged its area. Light shelters have been erected to protect vendors and their produce from the tropical sun. However, the Market is still badly overcrowded, especially at weekends, and there is little protection from rain or dust. Produce deteriorates rapidly, and the Market is considered by many to be unattractive, uncomfortable and unhygienic.

MARKET SURVEYS

Several surveys have been made of Koki Market. Belshaw recorded prices and quantities of commodities sold during part of 1951. Spinks organized a survey of sellers over three periods each of one week in 1962-1963 for the Department of Agriculture, Stock and Fisheries. Some of the results of his surveys are published in this paper for the first time. Epstein surveyed buyers and sellers in May, 1968, and a follow-up survey was carried out by the Department of Trade and Industry in February, 1969. The results of the follow-up survey were sent to Dr Epstein for processing.

The present surveys consisted of two series. Series A was composed of systematic samplings of sellers during the periods 20th August to 2nd September, 1969, 3rd to 16th December, 1969, and 15th to 28th April, 1970. The sampling was made each afternoon for 14 days by two groups, each usually consisting of an expatriate and a fluent speaker of police Motu, the lingua franca of most sellers at the Market. Every tenth seller was asked questions concerning his name, village, means of transport to the market, whether the goods were specially grown for selling, how he would use the money obtained from selling the goods, how he would dispose of unsold produce at the end of the day, and how long he would stay at the market. The quantities of produce offered for sale were weighed and sample

bundles of each commodity weighed and prices recorded. The total quantity available during each survey of most commodities was estimated using a scale-up factor.

The second series (B) consisted of five counts of all sellers classified according to tribe and commodity sold. The counts were made each afternoon from 28th May to 10th June, from 23rd July to 5th August, 1st to 14th October, 3rd to 16th December, 1969, and 4th to 17th February, 1970. The numbers of sellers recorded during the April, 1970, sample survey were scaled-up to complete the series.

RESULTS OF THE SURVEYS

Seasonality of Supply

Table 1 records the total number of sellers of different commodities from all areas as counted in each survey of Series B. It is an indication of seasonal variations in the quantities supplied, as, within broad limits, the quantities supplied vary directly with the number of sellers of a particular commodity.

Seasonal variations in the number of sellers in the classifications "bananas", "yams", "taro", "sweet potatoes", "betel nut, peppers, etc.", and "other commodities" are shown in the following graph (Figure 1) which is based on Table 1.

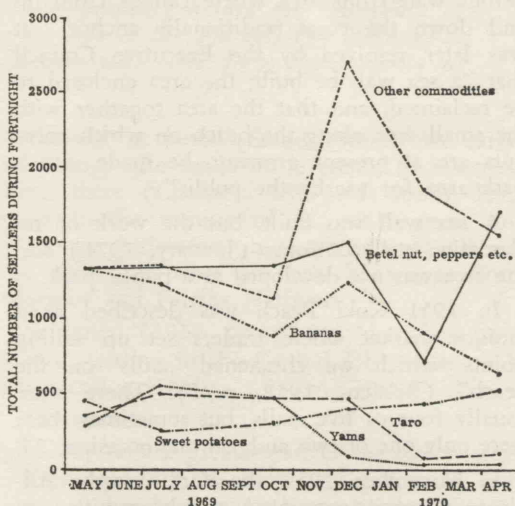


Figure 1.—Total numbers of sellers of various commodities during survey fortnights

Table 1.—Total number of sellers of various commodities during survey fortnights

Commodity	May 1969	July 1969	Oct. 1969	Dec. 1969	Feb. 1970	April 1970
Betel nut, peppers, etc.	1325	1323	1353	1506	712	1693
Lime	334	289	341	237	236	294
Fish and crabs	501	420	359	591	261	....
Meat	139	151	147	147	85	25
Sago	24	47	87	109	32	12
Sweet potatoes	455	245	297	395	438	516
Bananas	1328	1240	871	1234	897	637
Taro	357	501	483	460	68	98
Yams	287	549	484	90	23	37
Other	1327	1352	1127	2710	1848	1558
Total number of sellers*	3993	3876	3565	5238	2776	3569

*Many sellers sold more than one commodity and were therefore counted several times. The sum of the numbers of sellers of the different commodities is therefore not equal to the total number of sellers.

The numbers of sellers in the classification "other commodities", "fish and crabs", and "betel nut, peppers, etc.", were at a maximum in December. This may be attributed to the need for cash at Christmas, the calm seas of the doldrums before the north-west season which facilitate carriage by sea of supplies from areas lacking road access to Koki, and the peak flush of the mango and pineapple seasons.

The numbers of sellers of some starchy staples—bananas, yams and taro—declined markedly in February and April. The decline was probably caused by the low rainfall in the main supply areas 6 months before (*Table 2*). Only 226 points of rain were recorded at Kapogere in the Rigo Subdistrict and 526 points at Bereina in the Kairuku Subdistrict in the four months July to October, 1969. These two areas supply most produce to Koki Market (*Table 3*).

In contrast there was much less variation in the number of sellers of sweet potatoes. Large quantities of sweet potatoes were grown in the Sogeri and Brown River areas which were not affected by dry conditions to the same extent as Rigo and Kairuku.

Sources of Supply

Table 3 shows the sources of supply of ten of the more important products sold at Koki Market, and the changes in quantities supplied from each of the main producing areas which have occurred since 1962-1963.

The 1969-1970 surveys measured the quantities available each day in the market-place and the quantities shown in *Table 3* may be overstated due to double counting. This is most likely for betel nut, peppers and coconuts, from Kairuku.

Subject to the reservation, *Table 3* indicates that the quantities available at Koki increased

Table 2.—Monthly rainfall in areas supplying Koki Market, November, 1968 to December, 1969*

Met. Station	1968		1969											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Bereina (DASF)	25	178	830	738	263	914	138	153	22	0	453	51	826	615
Kapogere	23	1040	1011	301	547	1109	60	204	33	30	47	116	33	2610
Brown River	188	1782	682	1158	647	1509	144	790	31	63	487	409	662	704†
Itikinumu	661	2161	1687	1308	1069	1492	527	942	199	....	578	1052	1061	1357

Note.—Bereina is in the Kairuku Subdistrict, Kapogere in the Rigo Subdistrict, Brown River in the Brown-Vanapa Area of the Port Moresby Subdistrict and Itikinumu in the Sogeri Area of the Port Moresby Subdistrict.

*Source: Bureau of Meteorology, Port Moresby.

†Incomplete.

1½ times in 7 years. Of the ten commodities in the table, only the quantity of oranges declined. The greatest relative increase was in the quantity of pumpkins, which increased from 10 to 110 tons. The quantities of coconuts, yams, pineapples and betel nut also increased substantially. The availability of bananas showed a comparatively small increase of 30 per cent.

The greatest relative increase in the quantity available from any area came from Mar-

shall Lagoon/Abau, viz., 14 to 105 tons. The greatest absolute increase came from Kairuku whilst much larger quantities were also received from the Gulf District. The use of large double-hulled dugout canoes powered by out-board motors and the availability of regular shipping services (regularly twice per week from Kairuku) have facilitated the transport of produce from these areas to Koki (see Table 4).

Table 3.—Sources of supply to Koki in 1962-1963 and 1969-1970

Area	Commodity (tons)											Q 1969-1970	Q 1962-1963
	Bananas	Betel Nut	Pepper Stick	Sweet Potatoes	Coconuts	Taro	Oranges	Pineapples	Yams	Pumpkins	TOTALS		
1. Rigo													
1962-1963	226	85	36	30	12	15	1	11	5	2	423	}	2.4
1969-1970	459	63	29	50	137	69	0	63	72	76	1,018		
2. Kairuku													
1962-1963	162	114	14	1	17	15	12	7	4	7	354	}	3.4
1969-1970	140	680	110	14	155	22	6	54	27	....	1,214		
3. Gulf													
1962-1963	1	9	1	0	0	1	....	....	....	....	12	}	3.6
1969-1970	2	35	3	14	0	2	....	....	....	....	43		
4. Abau													
1962-1963	1	9	2	1	0	1	....	....	....	....	14	}	7.5
1969-1970	13	31	8	13	3	34	....	1	1	1	105		
5. Brown River, Vanapa													
1969-1970	79	4	11	62	4	19	....	3	16	17	215		
6. Sogeri													
1969-1970	16	1	2	41	0	18	....	6	1	12	97		
7. Other Port Moresby and Unclassified													
1969-1970	19	3	8	10	22	1	....	....	4	4	71		
8. Total Port Moresby (5+6+7)													
1962-1963	167	14	26	34	21	36	2	5	7	2	314		
1969-1970	114	8	21	113	26	38	0	9	21	33	383		
9. TOTAL													
1962-1963	558	231	79	66	50	68	15	23	16	11	1,117	}	2.5
1969-1970	728	817	171	191	321	165	6	127	121	110	2,764		
10. Q 1969-1970													
Q 1962-1963	1.3	3.5	2.2	2.9	6.4	2.4	0.4	5.5	7.6	10.0	2.5		

Note.—The 1969-1970 quantities may be overstated, particularly for betel nut, peppers and coconuts from Kairuku.

Source: 1962-1963 Unpublished survey—G. Spinks, Department of Agriculture, Stock and Fisheries 1969-1970 Survey A.

The quantity of goods available from the Port Moresby Subdistrict increased by only 20 per cent. This relatively small increase may be due to many villagers in the area engaging in wage employment in Port Moresby rather than subsistence farming. Moreover, most of the area was already provided with road access to Koki when the 1962-1963 survey was made, and consequently there has not been the same percentage increase in the period as a result of improved communications as in the outlying areas.

There is evidence of regional specialization whereby the different areas supply the commodities for which they are suited by their location in relation to the Market, and the mode and cost of transporting goods to Market. For instance, the quantity available of relatively low weight, high unit value products such as betel nut and pepper stick has increased from the Kairuku, Gulf and Abau Subdistricts, which lack road access to Koki Market, but is less from the Port Moresby and Rigo Subdistricts. On the other hand, the quantity available of a comparatively low value bulky crop such as bananas has increased from Rigo but is less from the Kairuku Subdistrict.

The changes may be attributed in part to transport costs which can be as high as 2.2 cents per lb for some sellers from the Kairuku Subdistrict using a combination of road and



(Photo D.I.E.S.)

Plate II.—Sellers at Koki Market

sea transport (Sherwin, unpublished,⁶ pp. 23-26) or 6 cents per lb by air.⁷ Transport costs from Rigo, on the other hand, are much lower, and are usually less than 1 cent per lb (Yeats, unpublished, p.15).⁸

However, the evidence is not consistent or conclusive, as increased quantities of coconuts and yams, both bulky commodities, were offered for sale by Kairuku villagers.

Means of Transport

Sellers were asked how they travelled to the Market. Their replies are summarized in Table 4.

Koki probably became a market place because it was a canoe anchorage where fishermen sold their catch from canoes on the beach. However, when the surveys were made, only 11 per cent of all sellers arrived at Koki by canoe, and canoes were a significant form of transport only for sellers from Marshall Lagoon/Abau and Kairuku (76 and 29 per cent respectively).

Note.—Fish sellers (many of whom arrive by canoes) were not included in the Series A surveys as fish were the subject of a survey being carried out by the Department of Agriculture, Stock and Fisheries at the same time.



(Photo D.I.E.S.)

Plate I.—Canoes on the beach at Koki. Note the canoe dwellings in the background

Table 4.—Means of transport

Area	Boat		Canoe		Truck		Other and No Answer	
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Kairuku	166	54	89	29	38	12	17	5
Rigo	1	...	5	1	347	95	12	3
Gulf	34	87	3	8	...	...	2	5
Sogeri ....	...	...	...	...	66	92	6	8
Marshall Lagoon/Abau	6	18	25	76	...	...	2	6
Brown River/Vanapa ....	...	...	...	...	90	94	6	6
Moresby coastal ....	...	...	1	2	53	95	2	4
Other (including unclassified)	...	...	...	...	33	33	68*	67
TOTAL	207	19	123	11	627	59	115	11

*Includes urban residents arriving on foot or by bus.

Nearly 60 per cent of sellers travelled to the Market by truck. Even from areas where canoes are available such as parts of the Rigo Subdistrict and the Moresby coastal villages, the great majority (95 per cent in both cases) arrived by truck.

The majority of sellers from the Gulf (87 per cent) and from Kairuku (54 per cent) travelled by coastal trading vessels.

WEEKLY PATTERN OF TRADING

Except during the period before Christmas, trading at the Market is usually slack from Monday to Thursday of each week. Only after 3.30 p.m., when the fishermen bring in their day's catch, and urban workers call in to buy food on their way home from work, is there much activity.

Fridays and Saturdays are the busiest times at the Market. Many sellers travel to Koki on Friday mornings and stay until Sunday afternoons or Monday mornings.

The number of sellers counted each day during the Series B surveys is shown graphically in Figure 2.

It is noteworthy that the number of sellers recorded was greater on the Administration pay-day (marked P) than on the "off" Friday during each survey.

The market is most crowded on Sunday mornings when many indigenes call at the Market after attending services at one of the churches in the area. These visits are largely

for social reasons such as seeing their friends and relatives. Whilst at the market, the visitors often make a small purchase such as betel nut, a small bunch of peanuts or oranges.

PRICES

Table 5 shows average prices and the quantity available per fortnight during 1962-1963 (Spink's survey) and during each of the three surveys of Series A.

Table 6 is based on the data in Tables 3 and 5. The data in column 2 are a simple average of the prices recorded during the three surveys of Series A (Table 5) and the information in column 4 is derived from item 10 of Table 3.

Relative price and quantity changes are shown graphically in Figure 3.

It is apparent that, for most produce sold at Koki Market, there has been very little change in price over the past 7 years. This is remarkable, in view of the increase in availability during the same period. The total population of Port Moresby, which represents potential demand, has grown from an estimated 31,108 in December, 1962 to an estimated 54,675 in December, 1969.⁹ This is an increase of 76 per cent which is less than the increase in the availability of all the items of Table 5, apart from bananas, which paradoxically show the smallest percentage increase in price. This may be due to a shift in consumer preference away from bananas towards substitute foods such as rice, bread and biscuits.

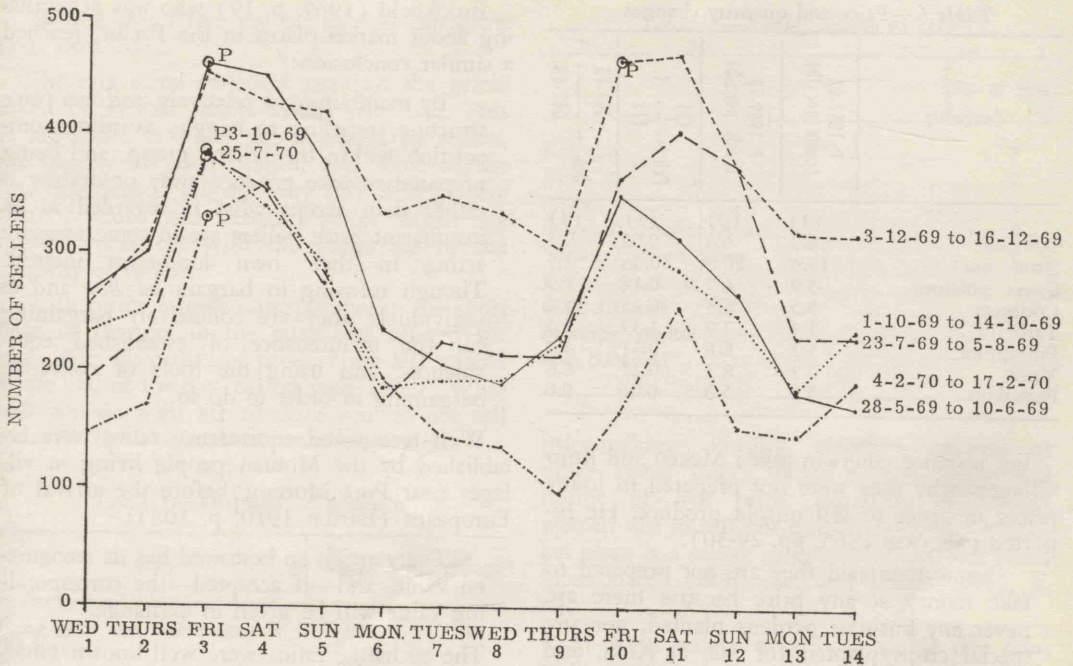


Figure 2.—Daily counts of sellers

Similarly, quite large seasonal variations in the quantities of commodities offered for sale were associated with small variations, if any, in prices (Table 5).

The explanation of the limited response of prices to large fluctuations in the quantities supplied is to be found in the notion of accepted or customary prices.

Table 5.—Price and quantity available of certain commodities

Commodity	1962-63		August, 1969		December, 1969		April, 1970	
	P (cents per lb)	Q (tons)	P (cents per lb)	Q (tons)	P (cents per lb)	Q (tons)	P (cents per lb)	Q (tons)
Bananas	6.2	21.5	5.9	4.2	6.0	36	7.1	7
Betel Nut	13.3	8.9	21.6	45	19.3	32	21.5	13
Manioc	4.1	0.1	4.1	1.4	4.5	0.9	5.6	1.0
Sweet Potatoes	5.9	2.6	6.6	6.4	6.3	10.0	7.2	7.2
Coconuts	5.5	1.9	7.6	8.3	5.6	28.6	5.8	4.4
Taro	3.4	2.6	8.6	8.0	6.6	7.9	8.6	1.6
Papaws	4.6	0.4	6.8	2.0	6.1	3.4	7.8	2.0
Pineapples	5.2	5.1	7.0	0.03	6.6	14.0	....	0
Yams	7.2	0.6	7.3	10.6	7.5	2.6	10.1	0.5
Pumpkins	5.0	0.4	5.0	5.7	5.2	0.5	5.7	6.1

Table 6.—Price and quantity changes

Commodity	P 1962-63 (cents per lb)	P 1969-70 (cents per lb)	$P_{ch} = \frac{(2)}{(1)} \cdot 1$	$Q_{ch} = \frac{Q_{69-70}}{Q_{62-63}} \cdot 1$
	(1)	(2)	(3)	(4)
Bananas	6.2	6.3	0.02	0.3
Betel nut	13.3	20.8	0.56	2.5
Sweet potatoes	5.9	6.7	0.14	1.9
Coconuts	5.5	6.3	0.15	5.4
Taro	3.4	7.9	1.33	1.4
Pineapples	5.2	6.8	0.31	4.5
Yams	7.2	8.3	0.15	6.6
Pumpkins	5.0	5.3	0.06	9.0

For instance, Sherwin asked Mekeo and Roro villagers why they were not prepared to lower prices in order to sell unsold produce. He reported (Sherwin 1965, pp. 29-30).

"Some men said they are not prepared to take money at any price because there are never any business gardens planted, nor any special crops planted for sale at Koki, and men and women take to Koki only what is surplus to their own needs. They are prepared to accept only customary prices because they rely on their gardens for food, not money; and since they have ample food, they don't eat their money. If their gardens were grown for business reasons only, they would be prepared to take variable prices.

"Probably a stronger reason why they don't vary prices is that they don't much wish to introduce price competition among themselves in the market and any consequent unpleasant forms of retaliation. By sustaining prices at a constant and reasonably high level, they consider they are better off all round."

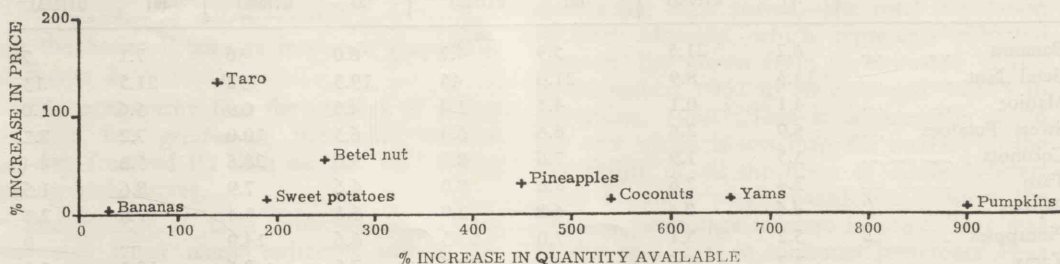


Figure 3.—Comparison of price changes with quantity changes, 1962-63 to 1969-70

Brookfield (1969, p. 19) who was generalizing about market-places in the Pacific, reached a similar conclusion:

"By maintaining a relatively uniform price structure, refusing to haggle, avoiding competition within the sellers' group, and being prepared to take produce away or destroy it rather than accept what is regarded as an insufficient price, sellers are in some measure acting in their own long-term interest. Though refusing to bargain *ad hoc* and as individuals, they are collectively bargaining for the maintenance of established equivalences, and using the tools of collective bargaining in order to do so."

Well recognized equivalency ratios were established by the Motuan people living in villages near Port Moresby before the arrival of Europeans (Barton 1910, p. 108):

"Every article so bestowed has its recognized value, and—if accepted—the corresponding value will be given in exchange."

The exchange ratios were well known (*ibid*, p. 115):

"One large 'toa' (armshell) buys one large 'gorugoru' (250-360 lb sago) or one 'asi' (dug-out canoe). One large 'uro' (clay pot) buys one 'turua' of sago (about 80 lb). Small 'uro' and 'keikei' (clay pots of different shapes) buy each a 'kokobara' (about 40 lb sago)."

Sellers at Koki continue the traditional practice of trading at established rates, and any attempt to haggle by buyers is indignantly resisted. The attitude of sellers is epitomized by the angry reply of one seller to a would-be bargainer:

"If you don't like my prices, you can grow your own food."

There is some variation amongst the prices asked by various sellers at any one time. This is inevitable as scales are not used by sellers, the quality of goods varies, and some of the less experienced are not very skilful at pricing their produce and demand prices which are quite inconsistent with the prices set by the majority of sellers.

With prices largely unresponsive in the short term to changes in the quantities offered for sale, large quantities of produce are left unsold at the end of the day. Sellers were asked "What will you do with the produce you do not sell today?" *Table 7* summarizes their replies.

Table 7.—Disposal of produce

Reply	Number	Percentage
Bring back and sell tomorrow	653	62
Eat oneself	270	26
Give away	63	6
No answer	52	5
Throw away	7	1
Sell elsewhere	3	...
TOTALS	1,048	100

Most sellers (62 per cent) said they would return on the following day to sell their produce. This is possible as Koki Market is open every day and most sellers stay for several days as is shown in *Table 8*, which sets out the modal length of stay at Koki of sellers from different areas. In addition, 298 or 26 per cent of respondents stated that they would stay at Koki for an indefinite period until their produce was sold.

Most sellers are subsistence farmers who travel to Port Moresby for social as well as economic reasons. The opportunity cost, in terms of foregone income, of selling at Koki is negligible and they do not mind if several days are occupied in selling their produce.

Price determination at Koki shows many of the characteristics noted at similar markets in sub-Saharan Africa, where "supply and demand forces are operative, but are affected by a variety of social factors which impinge on

Table 8.—Modal length of stay

Area	No. of Days
Kairuku	7
Rigo	2
Sogeri	1
Marshall Lagoon/Abau	7
Vanapa/Brown River	1
Urban residents	1
Gulf District	4
Moresby coastal	1
Not classified	1

price-making: kinship, clanship, religion or other status indicators of buyers, traditional norms of just price, eagerness of market women not to sell out quickly because the market place is a source of entertainment and social intercourse" (Bohannon and Dalton 1962, p. 8).

At Koki sellers who make single day trips to the market place, usually take unsold produce back to their villages. Most produce taken to the market is produced primarily for subsistence purposes and unsold produce can easily be consumed by producers.

Here then is a form of price maintenance which derives from pre-contact times, whereby sellers act as a group in order to maintain established prices. Prices show only small response to fluctuations in the quantity supplied and in the absence of price fluctuations, demand is determined exogenously. Supply is an endogenous variable in that it is equated with the quantity demanded at established prices by sellers who limit supplies, either by returning with the same produce on the following day or by withdrawing produce from the market and consuming it in their home villages.

MOTIVATION

Sellers were asked what they would do with the money they obtained from selling the goods. Their answers are summarized in *Table 9*.

All answers were recorded. Many respondents stated that they intended to use the money for several purposes, hence the number of replies exceeds the number of respondents, i.e., is greater than 100 per cent.

Table 9.—Stated use of money 1969-70

Use	Number	Percentage of Respondents	Classification of Use
Spend on food	546	53	Consumption
Spend on clothes	376	35	Consumption
Spend at store	179	17	Probably consumption
Pay tax	153	15	Transfer
Pay fares	139	13	Marketing expense
Pay school fees	107	10	Transfer
Put in bank	64	6	Investment
No answer	56	5	....
Build house	56	5	Investment
Give to Church	50	5	Transfer
Spend on business	40	4	Investment
Buy truck	26	2	Investment
Buy outboard motor	13	1	Investment
Other uses	15	1	Various

Most sellers were motivated by the need for cash for consumption items, and only 6 per cent stated that they would save all or part of the money they obtained. Even smaller percentages advised that they would spend cash on other investment projects.

It appears that the propensity to consume of Koki sellers is high, and that few sellers are motivated by the desire to save or invest.

In the 1962-1963 survey carried out for the Department of Agriculture, Stock and Fisheries by Spinks, sellers were asked their reasons for selling. Unfortunately the data were classified on a different basis from that used during the 1969-1970 series, but an attempt has been made to compare the results of the two surveys. In Table 10 the percentages of Table 9 have been classified and modified so as to be comparable with Spink's percentages.

There has been a very marked decline in the percentage of sellers who require money in order to pay taxes. The decline is partly due to the relatively small percentage of sellers who were selling in order to pay taxes during the December, 1969, survey. This was by far the busiest period when over 45 per cent of the total sample in the 1969-1970 series was taken.

Table 10.—Comparison of stated use of money—1962-1963 and 1969-1970

Use	Percentage	
	1962-63 ⁽¹⁾	1969-70 ⁽²⁾
Tax	39	14
Equipment ⁽³⁾	8	7
Food and clothing	22	49
Education and social ⁽⁴⁾	13	14
Savings	4	6
Loans and business ⁽⁵⁾	5	4
Other ⁽⁶⁾	2	1
No answer	7	5
TOTAL	100	100

(1) Where more than one use was given, the first was used in the Table.

(2) Percentages in this category are not precise.

(3) Includes housing, building materials, outboard motors, repairs, radios, shotguns.

(4) Church and club funds included. In the Port Moresby Subdistrict sales of small quantities of coconuts by school children were included in the 1962-1963 percentage.

(5) Repayment of loans, co-operative shares, trade stores and goods for trade stores.

(6) Includes feasts, sing-sings, bride prices, gifts, etc.



(Photo D.I.E.S.)

Plate III.—A seller from the Mekeo selling betel nut. Of the four people in the picture, only one is actually offering produce for sale

Moreover, from two groups of sellers which together made up over 10 per cent of the sample in the 1969-1970 series, only one respondent said he wanted money to pay taxes. These two groups were the highland labourers working at Sogeri, and urban residents who mostly sell powdered lime.

Changes in the timing of the surveys and in the numbers of sellers who are liable to pay taxes account for some of the decline. Nevertheless, it is apparent that although the need for money to pay taxes has grown in absolute terms, it is less significant as a proportion of total cash requirements. The desire for money to buy food and clothing became much more significant between 1962-1963 and 1969-1970. There is evidence of greater familiarity with and acceptance of non-traditional foods such as tinned fish and meat, and bread, sugar and rice, together with reduced dependence on subsistence foodstuffs and traditional clothing.

There was little change in the percentages of sellers motivated by the desire to save or to operate a business between 1962-1963 and 1969-1970.

Sellers were asked, "Are the goods bought especially grown for selling?" The answers to this question were most unsatisfactory in spite of the use of well-educated Motu speakers as interviewers, and it was apparent that many sellers were not able to give an unequivocal answer to the question. Most sellers planted their gardens for subsistence purposes and sold the surplus at the market place and consequently sold a heterogeneous assortment of produce, typical of the assortment of fruit and vegetables growing in a Papuan subsistence garden. Only the Kairuku villagers, who are subject to the constraint of high freight rates, and the Hula fishermen living near Port Moresby who are not subsistence farmers and who produce and sell in order to buy food, sold a comparatively narrow range of goods. Some sellers stated definitely that they were selling produce especially planted to sell at the market, but these were a minority.

Ward (1970, pp. 42-3) found a similar attitude to planting produce for sale amongst Rigo villagers:

"Field inquiries failed to show that any particular garden was planted primarily to sell its produce. Villagers appeared to be planting gardens a little larger than they might have done before the road (i.e., the Rigo road) was built, with the dual purpose of meeting the family's subsistence needs and of selling any surplus produce for cash in Port Moresby.

Questions regarding the proportion of crops sold rather than consumed drew a wide range of replies. Some villagers estimated that they sold up to three-quarters of the bananas they produced, while other crops were grown largely for consumption at ceremonies and not sold at all. The only valid generalization seems to be that if there is a surplus which would otherwise waste, or if there is a felt need for cash, an effort will be made to market the produce."

Lack of commitment to the market economy is also shown in *Table 11* wherein answers to the question "How often do you come to the market?" are summarized. Eighty-six per cent of sellers visit the market at irregular intervals. Only 10 per cent visit the market regularly.

Table 11.—Frequency of visits to Koki Market

Frequency	No.	Percentage
Every day	47	5
Every week	55	5
Most weeks	76	7
Sometimes	817	79
No answer	45	4
TOTAL	1,040	100

INFLUENCE OF TRADITION

As well as relatively inflexible prices, trading at Koki Market exhibits other characteristics which survive from trading practices of prehistoric society. These include the practice of selling food in bundles rather than by weight, and the custom whereby sellers from a village or a tribe sit or squat in lines in a particular part of the market, as shown in the map (*Figure 4*).

At Koki the customary location in the market place of sellers from each area is consistent with the location of their home villages in relation to Port Moresby. Thus sellers from Rigo, Marshall Lagoon and Abau which are to the south-east of Port Moresby, occupy the eastern part of the Market, sellers from Kairuku and the Gulf which are to the north-west of Port Moresby occupy the western part, and sellers from Vanapa, Brown River, Sogeru and Efogi which are to the north-east, occupy the northern part. Even "foreigners", such as

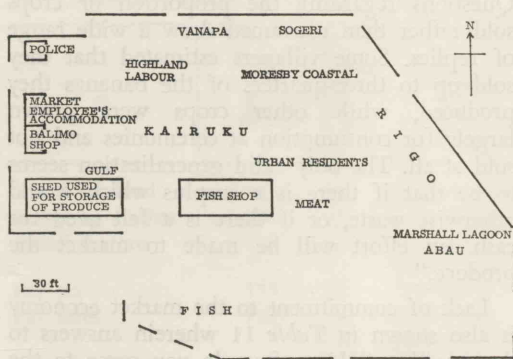


Figure 4.—Koki Market as at 30th September, 1970

labourers from the Highlands employed on the rubber plantations at Sogeri, usually sell in the northern part of the Market during their weekend visits.

AGENTS

No evidence of agents purchasing produce from village growers and selling at the market was found during the surveys. Some vendors act as agents by selling produce on behalf of friends or relatives in the village or by selling the remaining produce of a friend who has returned home rather than wait and sell all his produce himself. Some vendors, especially those from the Mekeo, which lacks regular road access to Port Moresby, sell on behalf of a village group and later return to the village to share the money with their fellow villagers. Some produce is sent to Koki by villagers and sold by a dependant who uses the money for his own maintenance. Sometimes money which is left over is sent to the supplier in the village, but respondents were vague about this and it appeared that suppliers often received no cash return for their produce.

As a rule producers prefer to market their own goods, and selling by agents is conducted in a casual, *ad hoc* way.

CONCLUSION

Trading practices at Koki Market show many characteristics which derive from pre-contact exchanges. The market belongs to a stage of

development "in which market places exist and the market principle operates, but only peripherally; that is to say, the subsistence requirements of the members of the society are not acquired, to any appreciable extent, in the market place or through operations of the market principles. As in marketless societies, the test is a simple one: land and labour are not transacted by the market principle, and if the market—in either sense—were to disappear from such a society, inconvenience would result but no major hardship would necessarily follow because the basic necessities of life are acquired otherwise than by transactions in the market. Neither sellers nor producers depend on market sale for basic livelihood." (Bohannon and Dalton 1962, p. 2.)

Whilst the prices of goods sold at Koki are, to some extent, subject to the constraints of supply and demand, most sellers belong to a village society which meets the main criterion outlined by Bohannon and Dalton: viz., land and labour are not transacted by the market principle. Koki Market is peripheral to the market economy in this sense and also in that no major hardship would result if the market disappeared and it is paradoxical that such a market operates in a town where the market principle is dominant.

But the resolution of the paradox is simple: although the market-place is located in a modern town, most sellers live in villages outside the town and the majority, with some exceptions, are not farmers producing especially for sale. Koki Market is thus an enclave of subsistence society in a modern town. However, it is changing and will continue to change in the same way that similar markets in other countries have changed as rural communities replaced subsistence farming with cash cropping. The higher expectations of the younger generation leading to an increasing need for money and accompanied by the erosion of the system of reciprocal obligations, will accelerate the rate of change.

More farmers who produce especially for sale will emerge, together with middlemen to carry out marketing in place of producers. Both farmers and middlemen will be more dependent on the market due to the division of labour and resultant specialization, and their operations

will be subject to the market principle. Concurrently, the factors of production—land and labour—will be allocated by price considerations to a much greater extent than at present. The pressure of economic necessity—of being compelled to earn a return in order to pay for the factors employed in producing the goods brought to the Market—will breach the solid front of collective bargaining and prices will react to fluctuations in supply and demand. The influence of tradition in the market will be greatly reduced.

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(Accepted for publication March, 1970.)