

# MAKING MONEY FROM FRESH FOOD IN THE KAINANTU AREA

## 1. MARKETING — GENERAL

By R. Michael Bourke,\* Principal Horticulturist,  
Highlands Agricultural Experiment Station, Aiyura, E.H.P.

### INTRODUCTION

This article and the following one are about how people can make money from growing and selling fresh food in the Kainantu area of the Eastern Highlands. The same ideas can be used in other similar areas, such as Henganofi, Goroka and Asaro or around Mount Hagen. The general ideas in this article can be applied in other parts of Papua New Guinea.

### WHY FRESH FOOD?

Here are some reasons why we must encourage domestic production of food within Papua New Guinea.

- Imports of food cost Papua New Guinea a lot of money. In fact most of the money earned from export crops (e.g. coffee, cocoa) is used to pay for imported food.
- If people buy locally grown food, the money used is spent in the community. It pays council taxes, school fees or goes to other business people. If people buy imported food at the store, most of the money goes overseas.
- Growing and selling food is already a large industry in Papua New Guinea. Nationally, the value of marketed food is about K35-40 million.

### THE KAINANTU ENVIRONMENT

#### Altitude

It is important that crops are grown at the altitude that gives the best quality product for sale. The altitudes of some places in the Kainantu area are:

Arona valley	1250-1450 metres	
Yonki township	1300	"
Konkua area	1550-1600	"
Kainantu airstrip	1570	"
Norikori area	1700-1750	"
Okapa road near Raipinka	Up to 1900	"

The lower altitudes in the area (e.g. The Arona Valley) are well suited to growing crops that do best in warmer places such as oranges, mandarins, pineapples, raspberries, avocado, capsicum, tomatoes and eggplant (aubergine).

The higher altitude places (1700 to 1900 m) are better for growing crops that need cool conditions, such as potato, strawberries, carrots, cauliflower, celery and peas.

#### Rainfall

In the Aiyura and Arona Valleys

---

\* Present address: Department of Human Geography, R.S.Pac.S., A.N.U., P.O. Box 4, Canberra, ACT 2601, Australia.

and Kainantu the rainfall is about 2000 to 2100 mm per year. It is usually dryer from May to September. The Kainantu area is dryer than most of the highlands.

Drought is more of a problem than at many other places, but it can sometimes be solved by irrigation.

### Soil

In the Kainantu District, soils are very variable. However, a good grower can make use of different soils. In a drought the farmer can plant on a heavy wet soil; in very wet weather the farmer can plant on the well drained soils.

The best soils are the well drained black soils on the fans and the alluvial soils on river terraces that are scattered around the District.

### Land

The locations of the best land in the Kainantu area can be found in a CSIRO report (CSIRO, 1970). DPI Land Utilisation

Section have also done reports for these areas.

Some areas with good potential for growing more food with machinery or by hand cultivation are as follows:

- Arona Valley, especially the land that is under a water lease for future stages of the Yonki power station.
- Arona settlement blocks. Some of this land is very good, especially near Omaura Village.
- Norikori. The fans on the margin of the swamp can be changed into very good land by simple drainage.
- Konkua area. There is a belt of good agricultural land to the north of Kainantu that is centred on the Konkua SDA mission.
- Kompri Valley. This is in the Henganofi District. The alluvial loam soils along the valley floor have very good potential for vegetable production.



Good agricultural land just north of Kainantu at an altitude of 1550 metres. The land is well suited to small-scale production of food for sale. Access to to lowlands towns from the Kainantu area is good.

## Access

Access to the lowland centres of Madang, Ramu Sugar township and Lae is good now that the Highlands highway is sealed all the way to Kainantu.

The Kainantu Service Station will transport produce to Lae for 3 toea/kg (unrefrigerated) or 4 toea/kg (refrigerated).

## MARKETS

The best possibilities for marketing fresh food are in the lowland centres. Many foods that grow well in the highlands, such as potato, oranges, mandarins, carrot, celery, and tomatoes, are still imported into Lae and Madang in large amounts.

Imports of some foods into Lae, Madang and all Papua New Guinea in 1981 are shown in Table 1.

A survey done in the Kainantu and Lae areas in March 1983 showed that the following markets for fresh food exist. Details about the types of fruit and vegetables that these markets would buy at the time of the survey are given in the next article: 'Growing and Marketing Food Crops'.

Kainantu food markets: Sales at Kainantu market are about a quarter of a million kina every year, including betelnut, cooked 'scones' and fresh food. The market is undersupplied with a number of introduced vegetables. SIL market has sales of K30,000 per year. About 70% of the buyers are expatriates. This market is undersupplied with some fruit and vegetables, including: watermelons, mangoes, pawpaws, pineapples, guavas, oranges, cauliflower, broccoli and celery.

TABLE 1. IMPORTS OF CERTAIN FRESH FOODS (TONNES) INTO LAE, MADANG AND ALL OF PAPUA NEW GUINEA IN 1981.

Commodity		Port of entry		
		Lae	Madang	All of PNG
ROOTCROPS/ CITRUS	Potatoes	275	47	2,559
	Onions	370	65	1,629
	Oranges	118	13	590
	Mandarins	22	4	106
	Lemons and Limes	0	0	26
FRESH VEGETABLES	Cabbage, round	0	0.4	141
	Cabbage, Chinese	0.1	0.1	35
	Carrots	18	4	168
	Cauliflowers	3	0.8	33
	Celery	6	2	82
	Cucumbers	0.1	0.1	8
	Lettuce	0.1	0.6	100
	Pumpkins	2	0	14
FROZEN VEGETABLES	Tomatoes	0.2	1	103
	Beans	5	2	54
	Corn	9	0.8	54
	Cauliflowers	3	0.4	15
	Peas	30	3	102



*A wide range of food crops on sale at the SIL market near Kainantu. Annual turnover in local markets near Kainantu is about a quarter of a million kina a year. Most foods are in good supply. Surplus local production could be bought by middlemen, for sale at Ramu Sugar and Lae.*

Kainantu area institutions:

There are 15 schools, health centres, etc. in the area. Some food is grown at the institutions but they also buy large amounts of rice, flour, biscuits and meat. (See the paper by Calcinai and Bourke, 1982). More locally grown food could be sold at institutions. For example Aiyura High School are short of bananas, fresh vegetables such as beans, corn and carrots, and fresh fruit.

Other Kainantu buyers include the supermarkets and hotel. They are well supplied with potatoes and most vegetables, but are always short of carrots, broccoli, cauliflower, tomatoes, peas and capsicum.

Ramu Sugar. At the time of writing the only outlet for fresh food in Ramu Sugar Township was the fresh food market. Fresh food of every type was undersupplied. The company was

willing to help local businessmen set up a retail store to buy in bulk from the highlands. Kainantu farmers are in an ideal position to sell food at Ramu Sugar.

Central Highlands Food Co-operative (CHFC) buys in the Goroka area and markets food to many centres in Papua New Guinea. They would buy most fresh food in the Kainantu area if at least 500-1000 kg/week could be supplied, not including cabbage, corn, pak choi and local pumpkin.

Niugini Produce Marketing (NPM) buys fresh food at Lae and Wau and has a retail store in Lae. They are short of oranges, mandarins, onions, pineapples, tomatoes, lettuce, carrots, broccoli and cauliflower. They would buy smaller quantities of passionfruit, strawberries, beetroot, choko fruit, turnips and zucchini.

Provincial Enterprises (PE), Lae markets food in both Lae and Port Moresby. They require more potatoes, oranges, mandarins, onions, and most vegetables (e.g. lettuce, tomatoes, cucumber, capsicum, silverbeet).

Other buyers in Lae include some restaurants and supermarkets.

Madang. There is scope to set up a retail fresh food business in Madang as the town is undersupplied with most fruit and vegetables. Kainantu is in a good position to supply as road access improves.

#### Wholesalers (Middleman)

A wholesaler is a person who buys from the grower and sells to a retailer or the consumer. The large companies discussed above are wholesalers.

Marketing by middlemen is very poorly developed in Papua New Guinea. I think there are good opportunities for people, especially young educated men, to buy food from farmers, transport it and sell it to consumers. This has already happened to some extent in Papua New Guinea. Examples are coffee buyers in the highlands; the middlemen who buy sweet potato from village women and sell it to institutions on the Gazelle Peninsula; and wholesalers who buy potatoes in Enga and transport them to Lae and the other highlands centres.

Here are some opportunities for middlemen:

Buying highland food of every type and transporting it to Lae, Ramu Sugar and Madang. Kainantu is oversupplied with cabbage; potatoes; and strawberries at the peak of the season (May, June, July). Potatoes are sold in local markets at a lower price (27 toea/kg) than the

wholesale price in Kainantu or Lae. Yet these foods are often in short supply in the lowlands.

On the return trip, lowlands produce could be brought into the highlands. Betel nut is cheaper in the coastal centres than it is in the Markham Valley or highlands and the season starts earlier in Madang. This means that prices are falling rapidly in Madang while the highlands market supplied by the Markham still has high prices. (Prices are usually lowest in Madang in February-March, but in Goroka they stay high till April, May and June).

Coconuts and other fresh foods are also cheaper in Madang than in Lae and the Eastern Highlands. Coconuts cost four times as much in Goroka as they do in Madang. Other lowlands foods which can be sold in the highlands include pawpaws, pineapples, tulip leaves, okari nuts, galip nuts, mangoes and breadfruit seed. Fresh food in the Madang area is generally cheaper than in Lae and the Markham Valley.

Mandarins are produced in very large numbers in the Binumarien and Arona Valley areas of Kainantu District. Some of this produce is not marketed because of transport difficulties. A lot of fruit is sold at Kainantu market, but very little goes to Goroka or Lae. Marketing Binumarien/Arona Valley mandarins presents another opportunity for a middleman.

Markham peanuts can be bought beside the highway for K10 - 12 for a bag of about 30 kg. They can be sold in small lots in the highlands so that a bag returns about K40.

One problem for the wholesaler is that some growers do not want to sell large quantities for a reduced price per kilo-

gram. In the examples given above a middleman can buy cheaply in larger quantities or can take advantage of low prices at the source of supply.

## CONCLUSIONS

Farmers in the Kainantu area are in a good position to make money from growing and selling food. Access to the lowlands markets is good. The urban markets of Ramu Sugar and Madang are undersupplied with highlands food, and some large companies in Lae and Mt. Hagen are willing to buy food regularly in moderate to large quantities.

There are also opportunities for people to act as wholesalers in buying, transporting and selling food.

## FURTHER READING

Calcinai, B.L. and Bourke, R.M. (1982). Institutional food production and consumption in Eastern Highlands and Enga Provinces. In *Proceedings of the Second Papua New Guinea Food Crops Conference*. R.M. Bourke and V. Kesavan (Eds). Department of Primary Industry, Port Moresby. pp. 184-190.

CSIRO (1970). Lands of the Goroka-Mount Hagen area, Papua New Guinea. CSIRO Land Research Series 27.