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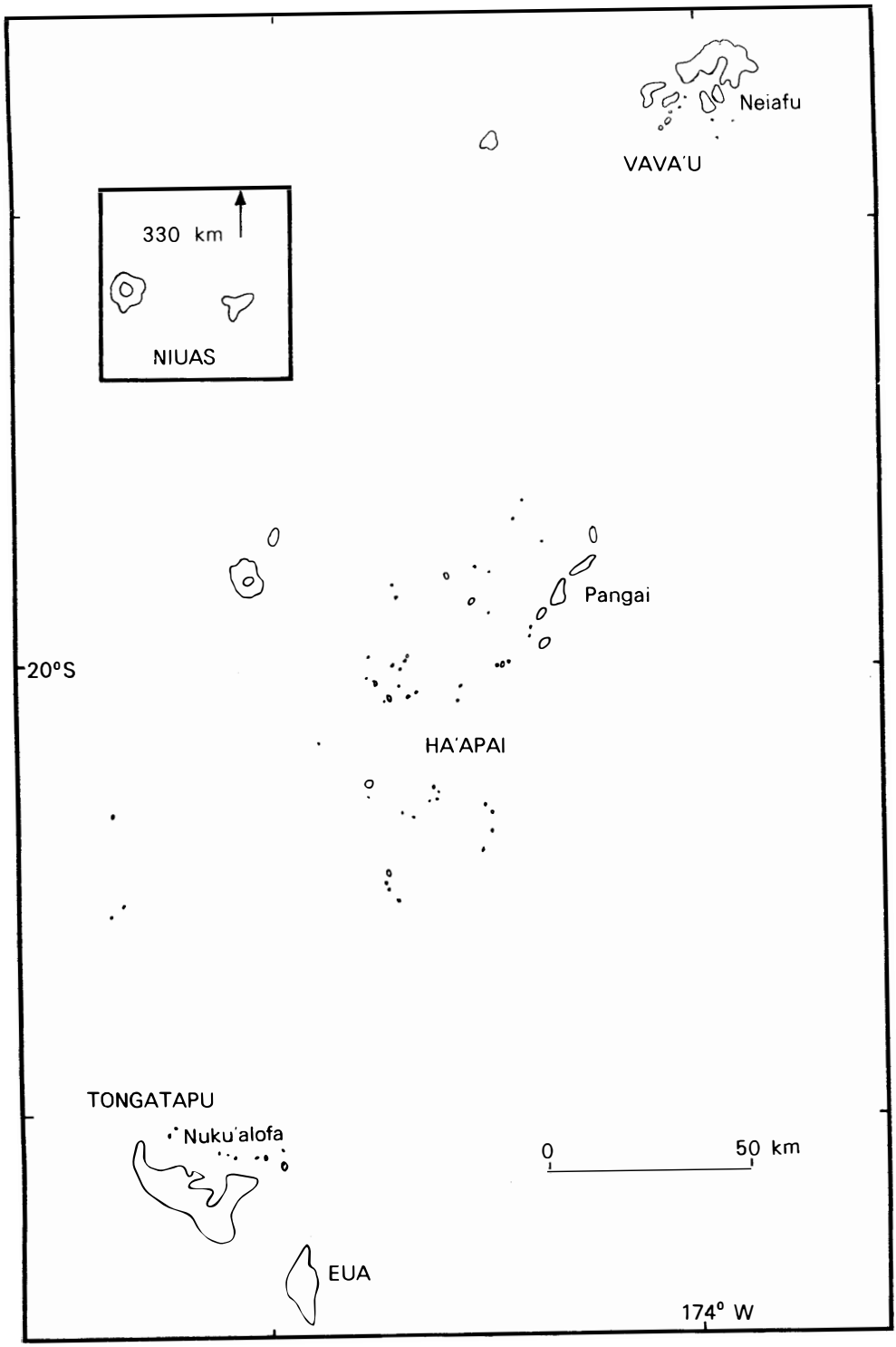
Corned beef and tapioca: a report on the food distribution systems in Tonga

Epeli Hau'ofa

Corned Beef and Tapioca



The Kingdom of Tonga

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Corned beef and tapioca: a report on the food distribution systems in Tonga

Epeli Hau'ofa

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Summary

This is a descriptive analysis of the commercial distribution of foodstuffs in the Kingdom of Tonga. It focuses on the sale of foods in retail stores and in the produce market in Nuku'alofa. The study describes the size and characteristics of retail operations, the wholesaling of foods, the personal characteristics of retail operators, the nature of stocks and the sales of types of foods. The study also looks at the produce market, examining the characteristics of vendors and their produce as well as those of the buyers and their purchases.

It was found that virtually everything sold in retail stores is imported and virtually everything sold in the produce market is locally produced. Most retail stores are very small affairs, undercapitalized and unstable. Most vendors in the produce market are semi-subsistence and semi-commercial growers, but with the growth of urbanization there is a move toward more commercial farming and toward the rise of middlemen. Tongan consumers strongly prefer the local root starches to imported equivalents, but much of the money expended on food is spent buying imported proteins.

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Chapter 1

Introduction

The research project

This report is part of a two year research undertaking, The Pacific Food Distribution Systems Project, which covered three countries: Fiji, The New Hebrides and Tonga. The International Development Research Centre of Canada and the University of the South Pacific sponsored the project which required its researchers to investigate:

(a) the existing distribution systems in the countries concerned with particular attention paid to linkages between towns and rural areas;

(b) the role played by indigenous and non-indigenous peoples in these systems;

(c) the government policies towards indigenous participation in the systems;

(d) the implications of government policies regarding indigenous participation.

The Tongan part of the project focused on domestic marketing of foods. Although recent full-scale studies have been conducted on various aspects of the Tongan economy (Hardaker 1971, Sevele 1973, Bollard 1974, and Thaman 1976), none have dealt with the internal marketing of foods in more than passing fashion; their focal interests were directed elsewhere. Owing to this, the present report is devoted largely to a descriptive analysis of structures and processes involved in retailing and produce marketing, aiming at presenting a body of concrete information for anyone interested in these aspects of Tongan society. Not being an economist, I have used the kind of language with which I am familiar. The report is by no means comprehensive. As I see it, its value lies in stimulating thought and interest, so that hopefully in the near future some expert will carry this kind of research much further in Tonga than I, a christian

innocent in an economist's den, have dared to attempt. And should men in positions of power and responsibility find it illuminating in a small way, and of some use in their work, then I have honestly earned my keep.

A brief review of relevant policies

Indigenous participation in the food distribution system in Tonga is not a felt problem as far as the government is concerned for the following reasons. First, the production and distribution of locally produced food, both commercial and subsistence, is almost all in the hands of Tongans or Tongan institutions such as church boarding schools. Second, nearly half the market for imported goods is catered for by a growing number of local importer/wholesalers, whilst much of the rest is in the hands of two multi-national firms which are also the two market leaders.[1] Third, retail trade throughout the kingdom is dominated by Tongan store-keepers as far as numbers are concerned. Fourth, the long and strongly traditionalistic and nationalistic reign of the late Queen Salote effectively reduced the virtual monopoly by foreign merchant-settlers of trade and commerce in Tonga.[2] In fact, government policy in recent years has been to attract foreign investment into the country, with local equity as a precondition. Ethnic parity in commerce, therefore, has not been a public issue in Tonga for several decades.

In the field of distributive trades, government concern over the years has been directed largely toward the regulation of prices, the collection of revenues from imports, the provision of produce markets in Nuku'alofa (and lately, in Neiafu) and the problems of the rising cost of food imports.

With regard to prices, there are two officers of the Ministry of Labour, Commerce and Industries who enforce the Prices of Goods and Services Act 1947, which lays down the maximum wholesale and retail prices to be charged on all goods. According to the *Third Development Plan 1975-1980* (3DP), the present price-control system has led to undesirable results including blocking of incentives for the rise of new importers, limiting price competition among merchants, and

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[1] *Third Development Plan 1975-1980* (henceforth designated 3DP): 262.

[2] For a full treatment of this development, see early chapters of Bollard 1974.

encouraging the evasion of law through falsification of documents or the use of doubtful commercial practices. The policy laid down in the 3DP is the overhauling of the present price-control system aiming at the encouragement of new importers and traders to enter the field and the fostering of competition among them. Control will, however, be 'exercised over goods and services supplies (sic) under monopolistic or near monopolistic conditions'.[3]

Up to now the tariff policy of the government has been geared almost entirely towards the collection of import duties which constitute the largest single source of government revenue accounting for more than half the total.[4] Until recently there has hardly been any need for the use of tariff policy as an instrument of protection. The new tariff introduced in 1975 comprised the Commonwealth Preference and the General Tariff. But since Tonga became an associate member of the European Economic Community, the policy now is to review the entire tariff structure and to introduce a new single-line tariff. But, very significantly, any new tariff system will be so structured as not to affect adversely the revenues accruing to government.[5] In other words, the inevitable increasing level of imports is good for oiling the wheels of government.

The establishment of a produce market and a bus terminal in Nuku'alofa was one of the major development projects of the *First Development Plan 1965-1970*. The Talamahu Market was officially opened in October 1970, and its purpose, to provide 'the public with a much needed facility for the marketing of dry goods in clean and hygienic conditions'.[6] In 1977 a second market was completed in Neiafu, Vava'u. The Market Regulations of 1970 stipulate the conditions under which they operate. The Nuku'alofa market is directed by a manager who is responsible to the Market Authority which consists of some of the highest ranking government officials: the Minister of Lands, the Director of Agriculture, the Director of Works, the Superintendent of Police, and the Chief Medical Officer. Among the rules governing the markets

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[3] 3DP:67.

[4] Op.cit.:60.

[5] *Ibid.*

[6] Report of the Minister for Agriculture for the Year 1970:23.

are the following. Before entering the market all produce must be inspected by the Department of Health. All produce must be washed clean of soil and other forms of dirt before admission into the market. All sellers of prepared foods and drinks must have a health clearance; all employees of the market and all sellers of fruit and vegetables must produce health certificates every quarter. The overall result has been that the Nuku'alofa produce market is probably the cleanest in the South Pacific. Vendors look as healthy or as sickly as those elsewhere; and produce probably perishes sooner in Nuku'alofa than in dirty markets since such produce, particularly root-crops, is cleared of the dirt which normally acts as a protective covering.

Imports, which increased in value by 132 per cent and in volume by 50 per cent between 1970 and 1974,[7] are a main concern of the government. Imported foods comprised a third of the total value of imports in 1974; and meats, fish and dairy produce accounted for 50 per cent of the total value of food imports.[8] Although various schemes (see below) have been adopted to deal with problems regarding imports, the government has admitted that the high level of imports will continue, and will 'assure the trading sector of an important role, and it can be expected to grow steadily as the money sector of the economy grows'.[9]

In endeavouring to decrease the country's dependence on imported protein foods the government launched in 1968 a Pig and a Poultry Scheme, and in 1971 a Cattle Scheme.[10] The Pig Scheme collapsed in 1975 because of the unfamiliarity of those involved with intensive animal husbandry. Now the Ministry of Agriculture is looking for semi-intensive husbandry methods in order to revive the Scheme in a modified form.[11] Nothing has yet resulted from this soul-searching.

As for the Poultry Scheme, all the broiler units have disappeared, and only two egg producers have survived at a

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[7] 3DP:10.

[8] *Statistical Abstract 1975*:58-9.

[9] 3DP:262.

[10] The Report of the Minister for Agriculture for the Year 1975:7.

[11] Op.cit.:10.

reasonable level. The main problem faced by poultry farmers is adequate supply of chicken feeds, all of which have so far had to be imported from overseas.

The Cattle Scheme has been more successful and in mid-1977 hundreds of breeding animals were imported from New Zealand in one shipment. Some of these have since died from strangulation (being tethered to trees with chains and tight collars), and some from being chased too much. Others, like their predecessors, will go at the next family funeral. Most of the survivors will end up eventually at the abattoir at Tupou College for sale at the government-owned fish and meat market in Nuku'alofa.

In view of the small land area of Tonga (259 square miles), probably the most hopeful and abundant source of protein foods comes from the ocean surrounding the kingdom. Until the government moved into deep-sea fishing, fishing in Tonga was (and still is) largely confined to the coastal shallows, the lagoons and the reef areas. There has been for some years a big shortage of fresh fish in Tongatapu due in part to the over-exploitation of these areas. The demand for fish is such that the value of imported canned and fresh fish rose from an annual estimated average of $69,000 in the 1960-70 period to $95,000 in 1972 to a staggering $366,000 in 1974.[12] To deal with this problem the government bought a long-line fishing vessel, *Ekiaki*, during the period of the *Second Development Plan 1970-1975*. In late 1976 two more modern fishing vessels, donated by Japan and Australia, were added to the *Ekiaki*. These three vessels have not made significant progress towards satisfying the local market, partly because a good deal of the catch is sent to canneries in Pagopago and Suva. In 1974, for example, 46.13 tonnes of the *Ekiaki* catch of 66.34 tonnes were sold locally; the rest, that is the top quality fish caught, was sent overseas for the good prices they fetched.[13] It is estimated that Tongatapu alone can absorb a further 700-1000 tonnes of fresh fish every year without significant reduction in prices.[14] The part of the *Ekiaki* catch that is sold locally is subsidised by the government and is considerably cheaper than fish sold by private fishermen. One of the aims of the government is

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[12] 3DP:208.

[13] Report of the Minister for Agriculture for the Year 1974.

[14] 3DP:208.

to assist small-scale fishermen by enabling them to buy new equipment, to improve their vessels and by providing them with extension services. The target is to increase the fish landings from an estimated 935 tonnes (including the catches by private fishermen) in 1975 to 1100 tonnes by 1980.[15]

The field surveys

The research in Tonga began in October 1975, first by myself and toward the middle of 1976 with assistance from Stephen Halapua, a post-graduate student of the University of the South Pacific, who unfortunately resigned from the project before its completion. Halapua's resignation is most regretted since it deprived the project and this report of an extremely valuable body of data, namely the information on small-scale commercial and semi-commercial fishing, an important part of the food distribution system in the kingdom. It is hoped that Halapua's material will become available soon, as his study has so far been the only one of its kind undertaken in the South Pacific Islands.

In the period between February and July 1976 we conducted a general survey of retail outlets selling food and non-alcoholic drinks in Tongatapu, Ha'apai and Vava'u. Our aim in this survey was to cover as many stores as we could, obtaining information on personal characteristics of store-keepers, on the nature of stores themselves, the size, range and value of food and drink items and on the suppliers of such commodities. It was not possible for us to cover all the existing outlets, partly because of oversight, of the magnitude of such a task given the time and resources available to us and of the fact that many stores were left unattended when our surveyors reached them. The storekeepers were either in the bush, or in their places of employment or in other places where they could not be conveniently contacted. Nevertheless we obtained the information needed on 425 stores: 44 per cent of these were in Nuku'alofa, 34 per cent in rural Tongatapu, 12 per cent in Ha'apai and 11 per cent in Vava'u. These proportions are quite close to those stated in the *Third Development Plan 1975-1980*, which shows that 48 per cent of all business licences in 1975 were held in Nuku'alofa, 31 per cent in the rest of Tongatapu, 10 per cent in Ha'apai, 9 per cent in Vava'u, and 2 per cent in 'Eua.[16]

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[15] Op.cit.:210.

[16] Op.cit.:104.

Later in the year, I conducted a more detailed study of thirty stores in Tongatapu, that is, 10 per cent of food retail outlets in the island. In this study I obtained detailed information on daily sales of all goods for a whole week from each of the sample stores, on goods sold on credit, on goods given away on request or as contribution toward feasts such as funerals.

In addition to the store surveys, we conducted two others on vendors in Talamahu Market, and one (on two successive Saturdays) on buyers at the market. In the two surveys of market vendors we obtained information from 482 sellers; the other survey covered 665 buyers. In the surveys of vendors we sought information on personal characteristics of sellers, their marketing behavioural patterns, the kinds, volume, value and sales of their produce, and on the production methods and the transportation of produce to the market. Regarding the surveys of buyers, we similarly sought information on the personal characteristics of buyers, and on the types, volume and value of foods they bought.

All this information forms the basis for the analysis in the following two chapters. Chapter 2 deals with retail stores, and Chapter 3 with the produce market. The final chapter discusses briefly some of the problems arising from the report which, I hope, merit some policy consideration. One final point: all currency figures in the report are in Tongan pa'anga. Throughout the period of surveys the Australian dollar was worth T$0.88.

Chapter 2

Retailing foods

Introduction

Any man or woman in Tonga who has some cash and a degree of entrepreneurial spirit, may, with little difficulty, build a small house in the front yard and stock it with goods of a limited range, hoping that his friends and relatives, as customers, will help him become rich. Any fairly high-ranking government official or anyone with a regular cash income, frustrated with the ever-rising prices of commodities, can with similar ease build a small house in his front yard, obtain a quarterly trading licence at $10 for Nuku'alofa and $7 for rural villages, stock the store with goods purchased from wholesalers at Nuku'alofa, Neiafu and Pangai (the centres of the three main island groups of the Kingdom), or from Mu'a (the ancient capital), and thereby supply his family with relatively cheap consumer goods at wholesale prices, at the same time selling what he can to relatives, friends and neighbours at retail prices. Any man who has just returned from New Zealand, Australia or America loaded with one, two or three thousand dollars, or any woman whose absent husband regularly remits money from overseas, may set up a trade store for profit or to save money.

It does not really matter whether such a person knows anything about costing, accounting, and the like. As long as one has a dream, a fantasy or an impulse, one can set up shop and try. If one fails, as often happens, so what? One can always turn the ex-shop into a storehouse for yam, or into living quarters for the unmarried boys in the family. Moreover, one can close the store temporarily and restock it later when there is sufficient money to buy goods. Because most owners of trade stores do not depend entirely on retailing for their cash income, the failure of the business causes little economic difficulty. As the saying goes, no one in Tonga starves - not yet anyway.

The usual pat explanation that small retailers set up shops primarily for reasons of prestige and status is too simple. To begin with, there is not much prestige to be gained from small trade stores. The traditional ranking system of Tonga is much too sophisticated to include participation in doubtful enterprises as a basis for prestige and power. And the history of retailing in the Kingdom is dominated not by expansion and successes but by contraction and crashes. People build trade stores primarily to make money, or to save it; and more often than not they achieve neither objective. One out of every three trade stores in Tongatapu closed during a period of two years from 1974 to early 1976 (Table 2.1). As expected, Nuku'alofa with its urban concentration had the lowest failure rate, 29 per cent. The rate for Eastern Tongatapu, which comprises the best and largest agricultural lands, was 35 per cent, and for Central and Western Districts it was almost 40 per cent.

Storekeepers and other people see bad debts as the principal reason for the closing down of many trade stores in Tonga. That may well be an important factor, but it is not the only one. Social obligations bear down heavily on storekeepers. One woman whose store was practically denuded of goods said that she had just had two funerals in as many weeks. The first funeral cost her half her goods, the other half went to the second. Another woman asserted that she had had to close her shop because she had contributed too much from it in catering for workers constructing their new church across the road. Both she and her husband, a police officer, are pillars of their church so had to contribute more than others. It is part of the Tongan system of expectations that the strong and the well-off bear the greatest burden for their families, churches and communities. Again, people 'eating from their own stores' is a factor in their difficulties: as we shall see later, some people actually consume more than the profits earned from their sales. Finally, a significant number of stores, in Nuku'alofa at least, closed because the owners had emigrated overseas. I shall deal with these problems in more detail in later sections.

The size of stores

Most trade stores in Tonga are very small. Of those surveyed, 87 per cent were not more than 300 square feet in size - about 18' by 17' (Table 2.2). Most of them were constructed of corrugated roofing iron which is often used

for walling as well as for roofing purposes and flat metal sheets (see Table 2.3). Such stores are cheaper and quicker to construct than wooden and concrete buildings.

With very few exceptions, trade stores at the time of survey were owned by individual family groups (Table 2.4). The survey included three co-operatives only, and three stores owned by local branches of the Wesleyan Church in Vava'u. A few co-operative stores came into being later in 1976 and the first half of 1977 and have become quite popular because of their lower prices. But since they opened too late for inclusion in the general survey they have not been dealt with.

Not only are most stores very small, individual family-owned enterprises, but they are most likely to remain small for a number of reasons also. The first, of course, is lack of capital. Second, social obligations and family consumption from their own stocks eat into profits as well as capital. Third, the size of the total population of Tonga (just over 90,000 in December 1976) is small. Fourth, there is a proliferation of small trade stores selling identical kinds of goods. Fifth, the poor state of the national economy restricts expansion in consumption. And finally, the size of the stores is just right for a family to manage. Husbands, their wives and unmarried children manage the stores: from caution and bitter experience, people do not trust those outside their immediate families to take care of them.

Wholesalers

With two exceptions, wholesalers are based in Nuku'alofa with branches in Neiafu, the capital of Vava'u, and Pangai, the capital of Ha'apai. All wholesalers except three (all Europeans) are also retailers. The 1976 list of registered wholesalers, available at the Inland Revenue Office, shows that of the wholesalers dealing in foodstuffs two are multinational companies, two European businessmen, two part-European, one Indian, and six Tongan. Three Tongan wholesalers on the list (excluding the six mentioned above) have gone out of business. Another Tongan, who operated in Nuku'alofa, is for some reason not listed and the same is true of a European who operates in the second largest settlement in Tongatapu.

One European-owned company is managed and staffed entirely

by Tongans. This company has become the most popular wholesaler with the trade stores throughout Tonga. The owner was raised in Tonga and now leads a life of semi-retirement in Australia. The company, however, is widely regarded as a Tongan institution. The two multi-national firms, on the other hand, are staffed at the upper levels entirely by Europeans, part-Europeans and Fijians. As we shall see below, only two Tongan wholesalers have done relatively well with the small trade stores as far as food sales are concerned.

Of all the shops surveyed, only one imported its own goods. This store is owned by a husband-and-wife team. Initially the husband went to New Zealand as a migrant worker and bought goods which he sent to his wife to sell. On his return his wife started going regularly by ship to Pagopago to buy goods. Although better educated than her husband, she was too shy to send orders as she felt her English was not up to standard. Her practice of going to Pagopago ceased when officials began to apply the non-Commonwealth tariffs to her goods. This avenue closed, she began to send orders to New Zealand, using well-educated Tongans (mostly civil servants) to write on her behalf. But because of lost shipments and other problems, most of which could have been easily dealt with had she had any business training, she stopped ordering her own goods. Her husband is now a migrant worker in the United States, sending her goods which included a most sophisticated ice-cream making machine that blew up when she plugged it into the local electric circuit without using a transformer. Alas, such are the problems of the small Tongan entrepreneur!

The licence to trade

Every trade store must have a general licence to retail goods. In addition to this, each store may have two other licences: one to sell bread, and the other to sell fresh or frozen meat. Table 2.5 shows the regional variation in additional licences. As expected, Nuku'alofa has the largest concentration of stores (almost 60 per cent) with both bread- and meat-vending licences. This indicates first the heavier reliance on bread of the people of Nuku'alofa than of non-urban dwellers; and second, the better financial position of Nuku'alofa people which enables them to buy more meat than other Tongans. But the second point should not be overstated since rural people who work in or visit Nuku'alofa also buy a good deal of their meat from the town. I shall

deal with this in more detail below. Although Nuku'alofa dwellers buy more bread than their rural counterparts, the rural reliance on bread is far from being insignificant. As we shall see below, nearly 40 per cent of the weekly sale of bread in Tongatapu is to rural customers. The differences are most striking when we compare Tongatapu with Ha'apai and Vava'u. Excepting Pangai and Neiafu, more than half the stores in the two northern groups carry neither the bread-vending nor the meat-selling licences. This is one aspect of regional inequality within the kingdom which Sevele has pointed out;[1] it also suggests that because of their unfavourable economic conditions, the people of Vava'u and Ha'apai subsist on healthier types of food than the inhabitants of Tongatapu. (White bread, mutton flap and beef brisket are not the best forms of food nutritionally.)

Ownership of stores: personal characteristics of operators

Tongans own 94 per cent of all shops surveyed, and part-Europeans virtually all the rest (Table 2.6). Store-ownership reflects the homogeneous nature of the Kingdom's population. Nevertheless, although retailing is dominated by Tongans, wholesaling is undertaken by the few non-indigenous interests: multi-national firms and European businessmen who, together with overseas exporters, shipping companies and the government, are the real beneficiaries of commerce in Tonga.

Trade stores are registered in the names of either males or females. Table 2.7 shows that 43 per cent of stores in Tongatapu are registered by women; the corresponding percentage for Ha'apai and Vava'u combined is seventeen. This marked difference again indicates regional inequality in economic opportunities. In Tongatapu, where developmental activities concentrate, there are more opportunities for both sexes to earn a cash income: men engage in wage employment or other cash-producing enterprises while their women run the family stores. Hence the larger number of retail outlets registered by women on Tongatapu than in the outer island groups. In some cases, especially in Nuku'alofa, stores are registered in the names not of wives but of other female relatives, preferably ones who earn no regular cash income or, if married, whose husbands do not receive a regular income

[1] Sevele 1973, especially pp.36-55 for an introductory overview of the problem.

from wage employment. This is a device for avoiding paying too much income tax since husbands and wives are taxed as a unit. This practice is not as widespread as one would expect because it could lead to some difficult legal entanglements. If we examine the male/female registration within Tongatapu itself, we find that Nuku'alofa and Western District have far more stores registered under women than do Central and Eastern Districts. For Nuku'alofa, the explanation is the same as for Tongatapu generally. But Western District comprises only a narrow strip of land compared with the rest of the island, and is heavily populated, with very strong pressure on agricultural land so that men have to look for wage employment, especially in Nuku'alofa and overseas, leaving their women to mind the stores. Central and Eastern Districts have a more generous supply of agricultural land, thus men are more tied down economically to their villages than in Western District. But this is hypothesis only and needs testing.

The age distribution of owners (Table 2.8) again shows up regional economic disparity. On Tongatapu store-owners, 22 per cent are below the age of thirty; the corresponding percentage for Ha'apai and Vava'u is five. Furthermore, 7 per cent of Tongatapu store-owners are below the age of twenty, whereas none is in Ha'apai and Vava'u. These figures show that there is more scope for younger people to involve themselves in the cash economy in Tongatapu than in other parts of the Kingdom. Most store-owners (59 per cent) are between the ages of thirty and fifty. But in Vava'u and Ha'apai, 32 per cent of store-owners are over 50 years old; in Tongatapu the corresponding proportion is 19 per cent. When we consider this together with the very low involvement in Ha'apai and Vava'u of people under thirty in retail enterprises of their own, we arrive at a sociological factor of great importance in Tonga today. The traditional authority of older people is slipping in Tongatapu, where the rate of social and cultural change is fast, whereas the reverse is true of the northern groups. Thus the cost to Tongatapu of its greater commitment to the money economy is the speedier erosion of parental authority over children. Two minor examples illustrate this point. One is a Nuku'alofa man in his early 60s who is a retired superintendent of police. His married son (who is in his early 30s) lives with him in his house. The son recently built for himself a store over which he has complete control. The second case, in Vava'u, also concerns a man in his sixties and his son in his thirties.

Although the son operates the family enterprises, the father maintains a tight control over everything, as is proper according to Tongan tradition.

General education in Tonga is divided into three levels; the primary school, the junior high school (college education), and senior high school. The only forms of tertiary education are the teachers' training college and the recently established and poorly endowed Atenisi Institute which offers university level courses. Until recently, the junior high schools or colleges ended roughly at third form in Australian or New Zealand terms. Most of the major colleges have now extended to the fifth form level with students sitting for the New Zealand School Certificate examination, and there are at the moment five fully-fledged high schools with students sitting for the New Zealand or Australian university entrance examinations. Table 2.9 shows that 27 per cent of store-owners had junior secondary education, and 25 per cent had a primary school education only. Eighty per cent of storekeepers are aged thirty and above. Most, if not all, of these people received their education before the standards of the colleges were upgraded. For older Tongans, then, education was quite poor compared with that received by students today, let alone with other countries. With that kind of educational background, only a very few exceptionally gifted and ambitious individuals could hope to succeed in the world of commerce. The low level of educational attainment of most shopkeepers may account in part for the generally low level of performance of most small retail establishments. Because the better-educated are employed at middle and upper levels in government, church and other institutions, they do not need to participate in retailing. Other, better-educated people go in for more lucrative enterprises including commercial agriculture, transportation, tourism and so on, whilst many others live overseas as migrants or students. The problems of the brain drain are felt acutely in Tonga. The few who are involved in trade store operations and who are well trained are in business primarily to lower their household expenses, as mentioned earlier. Their stores are small - sufficient to stock groceries for themselves with some for sale. Six out of nine highly qualified owners of trade stores live in Nuku'alofa, where they can be found if they have not emigrated already.

Sources of income

Trade stores are such small operations that only 5 per cent of storekeepers and their families depend entirely on them for their cash income (Table 2.10). More than half of these stores are located in Nuku'alofa, the remainder being scattered over the rest of the country. With one exception, these stores are small and barely make enough to keep going. It is generally accepted that people must have other means of income to keep their stores in operation. The fact that nearly three-quarters of shops in Table 2.10 are found in the three centres (Nuku'alofa, Pangai and Neiafu) indicates rural-urban differences in opportunities to make money.

The other 95 per cent of storekeepers and their families have other sources of income beside the stores. If we take owners, we find that 123 (32 per cent) out of 391 store-owners have no other source of income (Table 2.11). But most of these are women whose husbands and/or children earn income from other activities (Table 2.13). As mentioned above, wives tend to stay home and run the shops while their menfold and other household members go out to earn money. Table 2.11 shows that about half of the store-owners who have sources of income other than from their stores depend wholly or partly on agriculture for this extra income: of the 135 people so dependent, 110 indicated that production for export accounted for all (77 cases) or part of this activity (Table 2.12). This degree of dependence is not surprising in a country where the economy is based on agriculture and where other economic opportunities are severely limited.

Table 2.12 also demonstrates that more than half of the store-owners who earn from selling at the local produce market live in Tongatapu, Eastern District having the highest single concentration, which is again an indication of the greater extent and availability of agricultural land there. Local vending is less important in the other island groups because there is no market in Ha'apai and, in 1976, a market only weekly in Neiafu, Vava'u. In Nuku'alofa, on the other hand, there is a six-day market to cater for more than 20,000 town dwellers.

Within the category of 'self-employment' (Table 2.11), the making and selling of handicrafts, cited as the sole source of extra income by eighteen store-owners, has a largely

agricultural base since many of the raw materials are cultivated. Sale of handicrafts is mostly to tourists, so this degree of dependence again reflects the overall economic structure; tourism ranks as the third money-earner of Tonga, after copra and overseas remittance.[2]

Overseas remittance ranks sixth on the scale of other sources of income for the owner. Some storekeepers are themselves living overseas as temporary migrant workers and sending money home; others have recently returned from a stint abroad with sufficient cash to start a store. A number of such owners are themselves public servants who go overseas every three years or so for their four month leave - working and remitting.

It can be seen readily from Table 2.11 that non-agricultural sources of income are derived mostly from Nuku'alofa where opportunities for making money are more varied and numerous than anywhere else.

Table 2.13 shows other sources of income for the family of the storekeeper apart from those which the storekeeper earns personally. One female storekeeper has four adult children living abroad who send her money regularly. Thus overseas remittance ranks highest as a source of family income. There are thousands of Tongans living, either permanently or temporarily, mainly in New Zealand, the United States and Australia.

Sales assistance

As most retail stores are family affairs, their organization is also a family matter. Employment opportunities in such enterprises are restricted largely to members of owning families. Tables 2.14 and 2.15 show the details of the kind of employment involved. Three hundred and ninety-eight stores provide employment of sorts for 674 persons, roughly two persons per store. Only 10 per cent of these workers are employed on a full-time basis; the vast majority are part-timers: 83 per cent of the stores are manned by either two or three persons working part-time. The usual set-up is as follows. The stores are minded by a man, his wife and a child; or a woman and one or two of her children. They are part-time workers, in that very often the man either has wage

[2] *Statistical Abstract 1975*:67, 68 and 75.

employment or is a farmer. He assists with sales in the early morning, late afternoon or evening hours. The wife, of course, has her own domestic chores and spends much of her day inside or around the house, tending the store only when summoned by customers. The children are likely to be at school for most of the day, helping out after school only. There are variations on who minds the store at what time but the above example is the general pattern.

Most stores (91 per cent) either cannot afford paid workers, or their owners have no intention of paying assistants while they can use members of their own families without cash payment. Because of this, retailing is a poor source of wage employment. Only 9 per cent of those who work in stores receive payment. Paid sales assistants are found mostly in shops in the two towns (Nuku'alofa and Neiafu) and a few in some large villages. As shown in Table 2.15, the majority of unpaid assistants are relatives (mostly female) of the owners. Some people trust their own relatives to mind their stores whilst others, due to caution or actual experience, do not trust their own relatives so employ unrelated persons as sales assistants. There is no hard and fast rule regarding employment of paid assistants, it all depends on circumstances, and on the predilections of particular storekeepers.

Characteristics of stores

Virtually all the stores (99.5 per cent) open six days a week; the strict sabbatarian laws of the kingdom prohibit commercial activities of any kind on Sunday. Most shops (69 per cent) open eight or more hours every day; in fact, the highest number (40 per cent) operate for more than twelve hours daily (Table 2.16). A few stores in the towns and larger villages actually have someone always in the store from early morning to about nine or ten at night. But mostly there is someone at home to open the store when summoned by customers. Most of those who open for only a few hours every day say they do so in order not to waste time. They operate only during those hours when people buy most: early in the morning, and early in the evening. During the rest of the day hardly anyone buys anything, especially in the rural areas. Early morning is the time when people buy things like sugar, tea, and especially bread and butter, for breakfast. Early in the evening is the time when people buy meats for dinner, or kerosene and other things used at night.

The owner of one of the two stores which operate for less than two hours daily is a young village school teacher. He says that he opens his store after school hours from 4pm to 6pm. This man is clearly an example of those who have stores not so much for profit as for their own home consumption. Such people plough their salaries into their stores to keep them going. However, instead of cutting down on their grocery expenditure they probably, in the long run, spend more because of the easy availability of goods. One final point - in the rural areas especially - customers can and do wake up storekeepers at weird hours of the night to buy cigarettes etcetera. One ex-storekeeper told me that he had closed his business because for years he had not had a proper night's sleep.

Fully one-third of all stores came into operation within one year of the date of the survey (Table 2.17). The proportion for Tongatapu (37 per cent) is understandably higher than that for Ha'apai and Vava'u put together (20 per cent). As mentioned earlier, one out of three stores in Tongatapu closed down within a period of two years (Table 2.1). It seems that about one-third of Tongatapu stores close down every twelve months, only to be replaced by an almost equal number of new ones. Second, Tongan stores have a very short life span, with only a tenth surviving beyond ten years. Third, when shops close they tend to do so permanently. In responding to the question - whether or not their stores have operated continuously without break since first established - only 6 per cent (26 out of 425) of the storekeepers gave a negative reply. Assuming a casualty rate of one-third of the stores (in our sample, 142 out of 425), then only 18 per cent of the stricken ones will reopen later. The rest will pass into permanent oblivion. Half of the stricken stores which reopened did so within one year of the date of closure. The others stayed closed for periods of up to six years. Some of those whose stores closed, to be reopened years later, were civil servants and teachers transferred from their home bases to work in other parts of the Kingdom for a period. They closed their stores, took their families away, then resumed trading on their return after their tour of duty. Some storekeepers closed their businesses, went overseas as temporary migrant workers, and returned later with sufficient cash to reopen. Finally, there is one storekeeper who stocks his store every now and then, and sells everything, mostly on credit, within a few days. He then closes his shop until debts are paid up, when he restocks for business, and repeats the cycle.

As we have seen earlier, most trade stores are physically small. As for contents, a small majority of trade stores have 50 per cent or more of their stock in food and drink items (Table 2.18). For most others (86 per cent, see Table 2.19), the items displayed on the shelves and under the counter are the sum total of their stock - they have no other storage areas. Food inventory is an excellent measure of the operational size of stores. For one thing, as we shall see below, the weekly sales of non-foods (not counting cigarettes and tobacco) account for only 19 per cent of total sales.

I have grouped the stores in the sample into four categories according to inventory size (Table 2.20). The first category, 'very small' (less than 100 items of food and drink), comprises 28 per cent of all stores; the second category, 'small' (100-500 items of food and drink), comprises 60 per cent; the third, 'medium' (500-1000 items), encompasses only 10 per cent; and the last category, 'large' (more than 1000 items), a mere 2 per cent.

Classification of store size in terms of food inventory (Table 2.20) closely parallels that of building area (Table 2.2). Thus 80 per cent of stores fall into the categories 'very small' and 'small' when size of food stocks is considered with 87 per cent being physically small (less than 300 square feet, or about 18' x 17'). Likewise, stores carrying large stocks account for 1.8 per cent, and those which are physically large (more than 900 square feet) for 1.7 per cent of the total.

The position of a store is important in terms of attracting customers. Main streets, main roads, strategic corners and the centre of the village are favourable positions for stores (Tables 2.21 and 2.22). As zoning is almost totally unknown in Tonga, not all strategic positions are marked with commercial establishments. The land tenure throughout the country is such that most pieces of land are individually owned through primogenital inheritance so that even in the business centre of Nuku'alofa a number of the commercial establishments stand on land leased from individuals who are themselves relatively poor, but whose fathers and grandfathers owned the land. In most instances outside the business centres of Nuku'alofa and Neiafu, stores on strategic sites are owned by the people on whose lands (town allotments) those positions are found. So we have the phenomenon of

stores of various shapes and sizes standing on favourable locations. The general picture which emerges from Tables 2.21 and 2.22 is that most stores are well located. Proportionately, however, the larger the store the less likely it is to be found at a poor location. For example, in urban areas 17 per cent of large stores, 25 per cent of medium-sized stores, 33 per cent of small stores and 39 per cent of very small stores have unfavourable locations (secondary streets and other inconspicuous positions). In the villages, 33 per cent of the very small stores have unfavourable positions, whereas the proportions for small and medium-sized stores are 21 per cent and 24 per cent respectively.

Table 2.19 shows that 86 per cent of stores are without storage areas. These are mostly stores in the categories of very small and small discussed above. Half the stores with storage areas are, as expected, located in Nuku'alofa. The large number of such stores found in the Eastern District of Tongatapu as compared with other rural and island areas, together with the fact that there are many more medium-sized stores in that district than even in Nuku'alofa (Table 2.20), is not easy to explain. There is of course the fact that Eastern District is the most prosperous rural district in Tongatapu. The explanation for the paucity of medium-sized trade stores in Nuku'alofa probably lies in the fact that the presence of large wholesale-retail firms and private companies in the business centre and within easy access by buses inhibits the growth in size of individually-owned trade stores in other parts of the town. One owner of a medium-sized store said that when the town buses started to run through his 'suburb' he lost a great many of his customers who prefer to shop in the business centre where the commodity range is wider and goods sometimes cheaper.

The possession of a refrigerator and/or a freezer is of crucial importance for the operation of stores, because it enables storekeepers to stock the most profitable commodities: beef brisket and mutton flap. Most cooling devices available are electrical but only some parts of Tonga have electricity: all of Nuku'alofa and Neiafu, and about two thirds of rural Tongatapu. Thus, most stores in Nuku'alofa have freezers and/or refrigerators; the same is true of Neiafu (Table 2.23). Tongatapu, as usual, has a distinct advantage over Ha'apai and Vava'u in this as in many other regards. Unfortunately though, storekeepers usually switch off their freezers at night and sometimes intermittently during the day, to cut

down on the electricity bill and what this practice does to the state of mutton flap and beef brisket, I wouldn't like to think. In areas where there is no electricity, refrigerators, if used, are kerosene-operated. In Tongatapu and Vava'u some owners of stores without a refrigerator or freezer buy frozen meats on Friday afternoons or Saturday mornings for sale to their customers because the demand for frozen meats (and indeed for other forms of meat) is highest on Saturdays in preparation for the Sunday mid-day dinner, the most important meal of the week. I shall deal with this in more detail below.

The nature of stocks

Retail stores throughout Tonga depend for their sales not so much on smallgoods as on very, very small goods - foodstuffs, toiletries, household cleaning agents, fuels, primary school stationery and smokes - things which people buy constantly for daily use. Durable commodities, such as clothing and machinery, are left to the big firms (in Nuku'alofa, Neiafu and Pangai) which can afford to sit on them for any length of time. Most trade store operators rely on quick turnover, hence the stock of cigarettes, meats, toilet paper, soaps, matches and the like. It must also be borne in mind that Tongatapu, which carries two-thirds of the whole population, is a small, flat island of just under 100 square miles, with all its settlement located within twenty miles of Nuku'alofa. A network of all-weather roads throughout the island and a relatively large number of buses and passenger-carrying trucks facilitate access to the capital. The same is also true of Vava'u, although there the existence of several inhabited islands complicates matters somewhat. In any case, most people of Vava'u live on the main island where Neiafu is located. Ha'apai is different in that it consists of widely scattered small islands. In general, people of the southern parts of Ha'apai look to Nuku'alofa while those in the northern parts look to Pangai.

Tongatapu and Vava'u residents' needs for durable and expensive goods can be satisfied easily by the simple device of taking a bus to the business centres of Nuku'alofa and Neiafu, where they can choose from a relatively wide range of goods and prices. (Actually, the range is very limited by international standards.) Another determining factor for the nature of commodities outside downtown Nuku'alofa and downtown Neiafu is that people do not normally purchase

supplies for a whole week (as do people of more affluent countries) and often not even for a whole day. Except for things like tea and sugar, people buy things for each meal. If they want to have some form of meat for lunch they simply send their children to the corner shop and later on they send them again to buy something else for the evening meal. This method of buying is due partly to restricted cash, partly to lack of refrigeration at home and not least to the fact that people know that supplies bought for a week are most likely to disappear within a few days. Thus small trade stores are not merely trading places, they are also neighbourhood pantries to which women and children go several times each day (except Sundays) to fetch things their families need for each moment.

Tables 2.24 and 2.25 show what owners think the proportion of food sales in their trade store is. About three-quarters of storekeepers said that the sale of food and drink accounted for more than 40 per cent of their total sales. As a rough estimate, 65 per cent of trade stores depend, for more than 60 per cent of their total sales, on food sales. The point is that stores rely more on foods than on non-foods for their turnover. This is even more so if cigarettes and tobacco are not included in the category of non-foods. We shall see this confirmed below in our analysis of actual sales.

Ha'apai and Vava'u stores rely more on food than do Tongatapu stores (Tables 2.24 and 2.25). The explanation seems to be that for economic reasons and because of their relative isolation, the northern groups of islands do not have access to the range of non-food commodities than Tongatapu has. Conversely, Tongatapu people, as customers, not only have access to a wider range of non-food commodities, but they have the money to buy these goods also. Within Tongatapu itself, fewer Nuku'alofa trade stores rely heavily on non-foods than do rural stores. This is probably because Nuku'alofa people have ready access to the much wider range of non-food commodities available more cheaply from big firms in the business centre; rural customers do not have equal access to such convenience. Rural stores, therefore, must stock more non-food commodities to meet the daily needs of their customers.

Suppliers of foodstuff

There are four main suppliers of food items: two overseas firms, a Tonga-born European businessman and a Tongan.

Table 2.26 gives the overall picture of the value of food stocked at the time of the survey. The two overseas firms, M and B, have their headquarters in Nuku'alofa with branches in Neiafu and Pangai. The European trader, J, is Nuku'alofa-based with a branch in Neiafu. T, the Tongan supplier, has not yet branched out of Nuku'alofa.

J's company, which has subsidiaries involved in travel, manufacturing and service industries, is managed and manned entirely by Tongans and is widely considered to be a native business concern, though the owner is actually a European. The two overseas firms, on the other hand, remain foreign, much more so in Tonga than in Fiji and Papua New Guinea where they have involved themselves deeply in the local economies. They are branches of big concerns and Tonga is peanuts to them. They, however, operate the two 'modern' supermarkets in Nuku'alofa catering for the needs of local Europeans and the indigenous middle class. There is a third supermarket, owned by a part-European, but it does not seem to be doing nearly as well as the other two. J and T, on the other hand, cater mainly for ordinary Tongans. Their shops in town are of the large trade store type, rather like the friendly neighbourhood street corner stores elsewhere. These stores are more in tune with the sense of ease of ordinary Tongans who are, of course, their main customers.

I could not obtain much specific information from wholesalers. After failing to get more than generalities from a few and a clear rebuff from one I gave up the attempt. In fact the only one who helped, to the extent of providing any figures I required, was the manager of one of the overseas firms and I am most grateful to him. Since, however, there were no figures available from other wholesalers for comparative purposes, I could not make much use of the figures from just one source. The figures supplied by the overseas firm, M, show the proportions for the wholesale and retail trade of its supermarket division which supplies grocery items (without distinguishing food from non-food) for small retailers. For the year 1974-75, cash and credit wholesale added up to 35.9 per cent of the total supermarket turnover, and for the year 1975-76 this went up to 47.4 per cent. The Tongan trader, T, put his wholesale turnover at 50 per cent. These two of the four main suppliers therefore rely for half their yearly turnover on supplying the hundreds of small stores throughout Tonga.

The preference of Tongan small stores for Tongan suppliers is evident in Tables 2.26 and 2.27. The two largest suppliers of food in Tongatapu are J and T (here of course I am treating J's company as a native establishment since that is the way it is popularly regarded). Whether the preference is a nationalistic sentiment is open to doubt, although that is part of the explanation. But there is little doubt that these companies tailor their approach to the ease of their customers, who are not used to dealing with the impersonal ways of the large-scale stores. In responding to a question put to him about the apparent popularity of his wholesale section, T said that he deliberately makes things easy for his customers. Small storekeepers, said T, feel intimidated when they enter a big building. He therefore lets his customers drive up in their mini-mokes or taxis to the back of his store and purchase their goods from outside through a 'hole in the wall'. Again, he has made it a rule that if a storekeeper wants to buy only half a dozen items, say of tinned fish or meat, he gets them at wholesale prices which would not normally apply with such a small purchase. Some of the storekeepers, T asserted, come daily with only two or three dollars to get things in small quantities. This statement from T is revealing of the scale of operation of many trade stores in the kingdom as we have seen already and shall see again below. Some storekeepers say that when there is a shortage of goods, which is not infrequent due to the precarious health of the national shipping line, they go to the large shops in Nuku'alofa and buy things from the shelves at retail prices, reselling them in their stores at prices the price-controller would certainly not approve of. Some retailers also say that when there is a shortage, wholesalers sell goods only at retail prices; when new shipments with higher prices arrive, the prices of old stocks rise illegally. The wholesaler's immediate concern is to get retailers to stock their stores with corned beef, flour, sugar and all manner of goods. That is the end of his concern. If the retailer goes out of business there are always aspiring storekeepers around to take his place. It could be said that it pays very well indeed for some to keep the present laissez-faire commercial set-up in Tonga going. Village storekeepers and customers bear the brunt of this by paying high prices; they grumble but do nothing else, until very recently when co-operative stores in a few villages were established. These stores purchase goods in large quantities and are therefore able to sell more cheaply than normal trade stores.

Foods in stores

The value of what storekeepers had in stock at the time of the general survey is not an indication of what sells best. If we look at Table 2.28 we find that the stores surveyed had $12,996 worth of tinned corned beef in stock, $9453 of sugar, $2430 of flour, $2744 of mutton flap, $707 of beef brisket and $825 of bread. The actual sales of these commodities in one week in twenty-six stores, as shown in Table 2.29, are as follows: beef brisket $1106, bread $587, tinned corned beef $203, mutton flap $351, sugar $167, and flour $125. The difference between the value of stock and actual sale is easy enough to explain. Corned beef is a prestigious food item with significant ceremonial value. Every major Tongan meal or feast must have *lupulu*, corned beef with taro leaf and coconut cream wrapped and baked in banana leaf. It is a national delicacy which makes the salty, fatty corned beef taste heavenly; even the most hardened foreign weight-watcher succumbs to it. Every self-respecting store must have a stock of the ubiquitous corned beef, which bestows an aura of respectability on the place. If there is no corned beef it may mean either that the national shipping line is in trouble again as usual, or that the store is on the verge of collapse. It may also mean both. Tinned corned beef can last for months without going bad. But, however long it takes to sell the stuff, it will all be sold eventually, for Sunday meals and celebrations of all kinds which Tongans love, and for which the glorious *lupulu* is an essential. Flour and sugar come in big bags which are fairly expensive and relatively long-lasting. Beef brisket and bread are quick-sellers and do not last long. Thus if investigators arrive at a store, say, at 9.30am, most of the bread has already been sold in the breakfast trade and they can only record what is left in a special insect-proof case.

If we examine in detail the sorts of food that storekeepers stock, we find that tinned meats are near the top of the list (Table 2.30). This is a phenomenon common throughout the Pacific and needs no explanation. Sugar is used not only to sweeten beverages but also in cakes, local fruit drinks and cocktails, coconut caramel for the local pudding (*faikakai*) and other things which give sweetness, if not light, to the lives of the poor and the affluent alike.

Mutton flap hit Tonga with a bang a few years ago when the price of tinned fish and tinned meat loaf rose about 30c.

In 1975 and 1976 the price of flap varied between 20 and 30c per pound. Then beef brisket supplanted flap in terms of sales because of its slightly cheaper price (Table 2.31).

Lollies are not only for sale; they are used as a favourite substitute by storekeepers for real money, especially in rural areas. The customer goes into the store and buys something with, say, a 20c piece. The goods cost him 18c. The storekeeper dips his hand, not into the small cash box for the change, but into a large jar filled with lollies, takes two sweets and gives them to the customer in lieu of his 2c change. It is done with a straight face on both sides; no one complains about a miserable cent or two, it's just not done. If the customer is an adult he takes the lollies home for his children; if a child, as is often the case, he pops them straight into his mouth. This is how sweets are often disposed of by trade stores, and that is one reason why children grow up with a sweet tooth.

The explanation for the popularity of the locally-manufactured soft drinks escapes the author. But probably because of their being raised on lollies in lieu of small change, children grow up taking anything which has been sugared and dyed.

Jam goes with butter on bread, a favourite thing for afternoon tea feasts in villages throughout the kingdom. In these feasts, hosts present guests with large plates and even basins overflowing with bread with butter and jam, cakes and scones with butter and jam, and other things which must have jam on them.

Curry powder, with tomato and onion, are an indivisible trinity which goes into just about every meat dish, including the fabulous *lupulu*, and it makes beef brisket and mutton flap more palatable. Most Tongans do not use any other herbs and spices, which explains why the category 'Other spices' in Table 2.28 is almost at the bottom of the list.

Cocoa is as cheap as tea but it ranks higher because of the thousands of Mormons and Seventh Day Adventists in the

country who may not touch tea or coffee. In villages where significant numbers of Mormons and Seventh Day Adventists live, one finds stores stocked with cocoa. Whether the cocoa is actually bought is another matter.

Customers prefer imported cabin biscuits to the local variety; until recently, Tongans were brought up partly on the Fijian cabin biscuit, with a taste unmatched by the local product. Locally-manufactured biscuits came into existence in the late 1960s whereas the Fijian variety has been around for decades and has a familiar taste. At the time of writing the new proprietors of the Friendly Islands Biscuits Company, which includes an expert Fiji biscuit maker, have infused the Fiji taste into the local product to enhance its popularity.

It may be noticed that very few locally-produced goods go into the trade stores and though locally-produced items such as bread, soft drinks and biscuits are found there it must be remembered that they are made from imported ingredients; the only local element in them is water mixed with indigenous sweat. Most locally-produced or processed food, except meat, is sold in the market in Nuku'alofa: eggs, onions and peanuts (the latter are sold outside cinemas and wherever people congregate in large numbers). Locally-produced eggs are found in large quantities also in the supermarkets and large stores, to cater for foreigners and for the local bourgeoisie. The local chickens on the list were stocked in the store owned by a poultry farmer. Such chickens appear mainly when there is a dock-workers' strike in Australia or New Zealand or when ships are long behind schedule. This delays the transportation of chicken feed, all of which must be imported, resulting in the destruction of starving hens from the few poultry farms for sale to the public. The hens hit the market with hardly any flesh on them. In general, Tongans keep chickens running around their yards to be used when occasion arises so it requires a strong pair of jaws to chew these birds. The same goes for pigs. Even in Nuku'alofa where the law forbids pigs from roaming within the town boundary, live pigs are always available outside the Talamahu Market selling at prices ranging generally from $10 (for one-month-old sucklings) upwards.

There is no such thing as fresh or frozen fish in the trade stores (except in the two modern supermarkets in Nuku'alofa which occasionally stock some frozen fish), although the kingdom is graced with the presence of three modern-

looking fishing vessels. A good deal of the catch from these vessels goes to canneries in Pagopago and Levuka for the much-needed foreign earnings. In 1974, when there was only one fishing vessel, the revenue from sales to Pagopago and Levuka totalled $18,731, which did not significantly redress the drain overseas of $366,000 for the import of canned and frozen fish.[3]

Finally, an examination of the list of goods stocked in trade stores reveals that the more desirable and health-promoting commodities such as milo, powdered milk, fresh milk, eggs, vegemite, chicken, ovaltine and fresh meat, are towards the bottom of the list. These (excluding fresh milk, which retails at 15c an American pint) are expensive items out of the daily reach of most Tongans. One finds them largely in the few supermarkets and the large town stores for those who can afford them.

Case studies

I conducted case studies in two weeks early in October 1976, devoting the first week to Nuku'alofa and the second to rural Tongatapu. I selected by random sampling thirty stores representing roughly 10 per cent of all the stores surveyed in Tongatapu in the general survey early in the year, stratifying the sample according to size and location. Nuku'alofa comprises half the number of stores selected. The other half were eight from Eastern District, three from Central District and four from Western District. I left questionnaires at each store with a request to the owners to record all the sales (both cash and credit) made on each day of the week. The forms also included spaces for the recording of all purchases of new stock, food given away to relatives and friends with no expectation of payment and goods from the store consumed by the owner's household each day. Information on credit sales, give-aways, and owners' 'eating from their own stores' was needed to check on the assertion that these practices underlie the high rate of collapse of retail stores in the kingdom. The problem is, of course, a Pacific-wide phenomenon.

Of the thirty stores selected, two (one town and one rural) did not comply with the request although the owners assured me, even on revisits, of their co-operation; and two

[3] Report of the Minister for Agriculture for the year 1974:8; 3DP:208.

from Nuku'alofa were so blatantly unreliable that I considered them best left out. It was obvious from the results that the forms were filled from memory or faked in order to obtain payment for the service rendered. So the final sample of stores studied closely consisted of twelve Nuku'alofa and fourteen rural trade stores. Analyses of sales in these stores are given in Tables 2.32-2.35. The material is presented in some detail because these tables describe eloquently two basic characteristics of trade store operation: smallness in scale (in terms of range of stock and size of turnover), and limited and moment-by-moment consumption patterns.

From my original list of fifteen stores selected from Nuku'alofa, all three representing the smallest establishments (that is, those with less than 100 items of foods and drinks) had closed down. My assistant, who was involved with the store surveys from the beginning, says that at the time of the general survey these shops were obviously in their death throes. One had sold his store and emigrated to the USA. Another, in downtown Nuku'alofa, had allegedly sold his to the Mormon Church for office space and a third said that he had closed his store because his wife had gone to New Zealand. Of the ten stores representing the second category (small, 100-500 items), two had ceased to operate. One owner had closed his store and emigrated to the USA and the other said that he had ceased operating in order to preserve his sanity: he could not bear thinking angrily about his debtors. He said, as other storekeepers asserted, that the worst debtors were not poor people but those on wage employment.

There is one other point I should make. Trading in the kingdom in 1976 was severely affected by the unreliability of shipping, the low price for copra and the financial slump caused partly by the collapse of the temporary guest-work scheme with New Zealand, and partly by administrative difficulties and organizational shortcomings. Shortages in normally available commodities were a regular feature of commercial life because of chronic shipping problems. The national shipping line, then Pacific Navigation Company Limited (PNCL), was in a financial mess throughout the year and was chartering or selling its vessels to overseas concerns in order to meet its mounting debts to foreign and local creditors. At the time of writing, PNCL has been buried to be replaced by a new company Pacific Navigation of Tonga Limited (PNT) whose future is still uncertain. One beneficial result of all these shipping problems was that

whenever the vessels were in trouble, the import figures went down - but so did the export ones. The tight restriction on temporary emigration to New Zealand effectively dried up what was probably the most lucrative source of cash income for ordinary Tongans. Storekeepers assert that their trade in 1976 declined markedly because of the drop in the buying power of the people. Tinned fish, which hitherto had been a regular feature of all retail stores, disappeared from the shelves for some months until the latter part of November.

The weekly sales from the twenty-six outlets range from $1892.86 for a downtown Nuku'alofa store to $10.42 for a tiny store also in Nuku'alofa. If we examine the total sales of the twenty-six outlets we find that food items (including drinks) comprised 61 per cent of the total (Table 2.34). If we add smokes to foodstuffs the total goes up to 81 per cent. Although tobacco is a non-food, it is taken through the mouth and is virtually a food item to the inveterate smoker such as the author. Of the foods, meats sell best, constituting just over half of the total weekly sales of all foods, and about one-third by value of the total sales of food and non-food items. Flour and flour preparations, especially bread, constitute the second most sold group of foods, comprising 24 per cent of food sales, and 15 per cent of the total sales (food and non-food combined). Beef brisket and bread were the most sold individual items, the sales of which together covered almost half the value of the food sales. Beef brisket sold better than mutton flap, partly because at the time of the survey it sold more cheaply than the flap (Table 2.31), and partly because what flap was then available was the worst of the worst. Mutton flap comes to Tonga in two bad cuts, the lower part of the ribcase after cutlets have been removed and the flabby part of the sheep's stomach. The latter, which is mostly fat with some stringy flesh that smells not unlike the contents of the bowels, and is not much liked by customers, was the cut available. Corned beef is generally expensive, retailing at $1.23 for a one pound tin of Hellaby's Pacific, the most valued brand. Half the total sale of corned beef was made on Friday and Saturday. At the time of the survey, the normally popular tinned mackerel pike had all but disappeared; hardly any of it was seen in Nuku'alofa, and only a little was available in rural areas.

Almost half of the weekly sales of meats occurs on Saturday (see Table 2.32 and 2.33), mainly for the Sunday mid-day dinner which as we have seen is the main meal of the

week,when every self-respecting home must eat well. Countless church feasts are held every Sunday to honour preachers and to mark baptisms and all kinds of family commemorations. These are usually expensive feasts with people providing large quantities of meat for the glory of God and the good name and standing of their respective families; it is also very good for businessmen in Tonga and for the meat packers in New Zealand.

Sixty-two per cent of the weekly sale of bread was made in Nuku'alofa itself (Table 2.34). The high bread consumption in rural areas is not surprising. I have been told that children throughout Tongatapu prefer bread to any other starchy food although white bread is nutritionally inferior to the local starches. With the improvement in transportation bakers regularly deliver their wares to most parts of the island. Improved transportation has also enabled children to commute daily from anywhere in Tongatapu to secondary schools in Nuku'alofa and elsewhere. And it is much more convenient for mothers to provide their children with a quick breakfast before they catch buses to school, than to go through the bothersome and lengthy process of cooking a Tongan meal. Not the least important consideration is the fact that bread costs 20c a loaf throughout the island - a cheap price to pay for convenience. In Nuku'alofa itself, eating bread for breakfast cuts down on expenses, because local starches sold in the market are quite costly, as we shall see in the other section of this report.[4]

The volume of sale of meats and cereals as shown in Tables 2.32-2.34 is in line with the relative volume of imports of foods. The government's *Statistical Abstract 1975* shows that in 1974 (the most recent year for which figures are available) meats constituted the major item of food imports, followed by cereals (Table 2.36). The low level of sale of beverages is also commensurable with the import figures for 1974. The fact is that relatively speaking, Tongans generally have not taken to drinking much tea, cocoa or coffee. Villagers often brew a local weed called *moengalo* (lemon grass, *cymbopogon citratus*) which is obtained freely from the bush or the backyard and is a delicious drink.

[4]See also Thaman 1976:149 for a rank listing of goods commonly bought at small village stores. Thaman uses as his criterion for ranking the number of times particular items are bought, whereas in the present report I use value of sales as my criterion.

Because of the sad financial situation in 1976, Tongans were not only buying less than in previous years, but were also restricting their purchases to the basic foods: bread, butter, beef brisket and mutton flap. Luxury items such as jam, honey, breakfast cereals, etc. were beyond the daily buying power of most people. But one item of luxury sold very well indeed: cigarettes (and to a much lesser extent cigarette tobacco) which constituted 19 per cent of the total weekly sales. At the time of the survey, Benson & Hedges was the only brand sold in most stores. Other brands of cigarettes had been introduced but people declined to smoke them; manufactured in New Zealand, Benson & Hedges was the preferred brand to the exclusion of every other.

Table 2.31 shows variations in prices between stores of different sizes, and between stores in town and rural areas. Within each group, rural and urban, the range of prices in fast-selling items is not great, involving a few cents only. The only exception is bread which sells uniformly at 20c a pound loaf throughout Tongatapu. Variation in butter prices is not great, between 56-64c a pound packet, but when a pound packet is cut into eighths, some stores sell each for 7c and some for 8c. A second observation is that prices in rural stores are generally higher than those in Nuku'alofa, but only by a matter of a few cents. The price-controlling unit sanctions this rural/urban difference because of the extra cost of transportation to rural stores. Third, in general the smaller the store the higher the price of goods. This is because large stores order their goods in large quantities at discount prices whilst small stores often find themselves unable to purchase at wholesale rates because they cannot buy in large enough quantities to qualify for wholesale prices. Besides, smaller stores need to charge higher prices in order to reap some profit in a reasonable time. This makes their position even worse for customers tend to avoid them - except their relatives who patronise them out of loyalty. But these relatives are the very ones who demand credit and pay slowly, and often not at all. Finally, the variation in the prices for sugar as shown in Table 2.31 is the biggest among the fast sellers, 16-30c per pound. This is deceptive. The normal variation is between 16c and 18c; only one store charges 30c a pound for sugar. This store depends largely on sale by credit and can afford to charge at higher rates. People say that some storekeepers deliberately raise their prices if the purchase is done on credit. They can do it because the debtor usually has no

money between pays, between coconut sales or between market days. He is therefore only too thankful that someone is doing him a favour by providing for his needs on deferred payment.

Tables 2.37-2.38 and 2.39-2.40 show the weekly sales of twelve selected stores of varying sizes and locations, six in Nuku'alofa and six in Tongatapu. The downtown Nuku'alofa store (Table 2.37, column 1) is a wholesale-retail establishment owned by the wife of a Tongan who is a middle-rank government official. The store represents those with more than 1000 food items in stock, the largest stores in the sample. The retail division of this enterprise is positioned in one of the choicest locations in town - facing the market and the central bus stop, the point where a great deal of Tongatapu life converges daily. This store caters almost exclusively for Tongan customers and the range of goods for sale is less than that of the medium-sized store (column 2). Its patronage comes not only from Nuku'alofa but also from the rural areas. Many of the rural villagers come to town to sell their produce in the market and then buy goods, especially beef brisket, to take to their villages. In addition, villagers who work in Nuku'alofa enter the store to buy goods before boarding their buses and setting off for home. (Some villages have no electricity and therefore no refrigerators to store the highly perishable beef and mutton flap.) Although this store is located in town, it is patronized by the whole of Tongatapu. Its weekly turnover alone accounts for more than one-third of the total sales of the twenty-six stores included in the second survey. This store represents those individually or family-owned wholesale and retail outlets located, with one exception, in downtown Nuku'alofa. But it is not representative of the supermarkets in town which cater largely for expatriates and well-off Tongans, and have a range of goods comparable to the smaller supermarkets in the Suva suburbs.

The weekly sale of meats, bread and cereals in the downtown store comprises 84 per cent (by value) of the store's sale of food items; the sale of food and cigarettes accounts for 82 per cent of the total sales for the week. The sale of beef alone (the price of which dropped at mid-week to 25c a pound, the cheapest charged anywhere at the time) amounts to one-third of the total sales of all items. In fact, this store sold much more beef brisket in one week than all the other twenty-five stores combined.

Most transactions at this store are in cash with only $38.74 (2 per cent) on credit. No data were obtainable on goods taken for home consumption. If anything was removed for that purpose the owner would have taken it from the storage area. The owner employs two non-relatives, both females, as paid sales assistants.

Calculating on the basis of a 10 per cent mark-up for retail prices, I have estimated the store's profit for the week to be about $185 after credit sales have been removed from the total. Although this is a rough estimate I think that it is not too far off the mark; the actual profit would be only slightly higher or lower than the estimated one. The permissible mark-up for different items varies between 2.5 per cent and 15 per cent, that for most goods sold in trade stores between 7.5 per cent and 15 per cent, so that the 10 per cent seems to be a reasonable basis for estimating profits for this and for the other stores in the sample. One final point about the downtown outlet is that no figures were obtained from the wholesale division. In comparison with the other wholesalers in town this one is, indeed, a small venture; in Table 2.27 it is included in the category '28 other suppliers'.

Store 2 (Tables 2.37-2.38 column 2) represents the medium-sized Nuku'alofa stores. It is owned by the wife of an enterprising man who also receives a good, regular cash income from renting houses, running launch cruises and transportation, and from owning the only poolroom in his neighbourhood. The store is located in a strategic position, on the junction of two main streets. The storekeeper's husband, who also does a good deal of work for the business, said that because of the financial slump his turnover in 1976 was half that of previous years.

The store, a concrete building of about 700 square feet, with a storage area, deep-freezer and refrigeration, had, at the time of the general survey, been operating without interruption for four years. In the survey week, the biggest item of sale was cigarettes, followed by bread, beef brisket, sugar and butter respectively. The total sales of food were almost three times the total for non-foods excluding cigarettes. The estimated profits for the week were about $50 after the very small credit sales were deducted. The owner's husband, a part-European, said that he was strict on credit: he did not normally allow it except occasionally to most trustworthy

customers and even then only for small amounts. The owner's household consumed $22.77 worth of goods from the store during the week. This amount was well within the profit margin. Nothing from the store went out as gifts or contributions to feasts and so forth. The owner tended the store herself and employed a close female relative as sales assistant; her daughters also assisted out of school hours.

The third Nuku'alofa store (column 3) is owned by a young, relatively well-educated couple in their late twenties. Both husband and wife have wage employment, one as a clerk and the other as a librarian. They are, by Tongan standards, a fortunate couple, earning fair salaries. The wife, who also earns cash from selling handicrafts, said that her husband was the one who financed the store which was established for saving money and for profit. The husband's mother, who lives with them, took care of the store during working hours.

The store building is a small concrete affair of about 280 square feet, equipped with a freezer, and had been operating continuously for three years at the time of the general survey. The store operated ten hours a day for six days a week. It is one of the small-sized businesses with 100 to 500 items of food and drink in stock. According to the owner, food and drink represent 60-80 per cent of the total annual sales.

Almost 80 per cent of the sales for the week were in foodstuffs. The largest item of sale was bread, followed by mutton flap, sugar, milk and butter in that order. Cigarette sales were very low, representing only 3 per cent of the total sales. Eighty-two per cent of the total sales for the week were on credit. This is the way of conducting business which has led to the fall of many trade stores in the country. However, leaving aside the credit sales, the estimated profit for the week was about $2; if credits are included, the profit rises to $12. During the week of the survey the owners' household consumption from the store totalled $36.12, and a further $11.12 worth of goods was given away to relatives and as contribution to a feast, which far exceeded the profit made during the week. It is clear that this store belongs to those owned by regular wage-employees who enter retailing mainly to save money on groceries.

The fourth Nuku'alofa store (column 4) belongs to a woman in her late thirties whose husband owns and drives a truck for hire. The husband's enterprise is the main money-earner for the family. The store is a small wooden building of 140 square feet and although it has operated for five years, it has not expanded in size nor has it acquired any refrigeration. The owner says that she does not want to expand, preferring the way business has been running for the last five years. She does not give credit. She is proud of her little store and would like to keep it as it is. Several other shops in the neighbourhood, she says, have sprouted but have disappeared because some of them tried to go too big. She herself has already established a reputation for reliability in terms of always having in stock the sorts of goods her customers need, and of operating twelve hours every day except Sunday. One of her sons works in a wholesale shop in the business centre of the town; he makes sure she never runs short of any important item. However the store-keeper does not stay in the store for twelve hours, but around her house, just behind, doing her domestic chores, and is always available to serve customers when they come.

Although this business was classified as a very small store at the time of the general survey, I have included it in the 'small stores' category for the following reasons. During the week of the second survey the store was filled with goods, putting it in the category higher than 'very small'. Second, its total sales for the week were much closer to the 'small stores' group than to that of the 'very small stores'.

The sale of food for the week was at least three times that of non-foods excluding tobacco products. Without refrigeration the store does not sell two of the biggest fast-sellers, beef brisket and mutton flap. Bread, corned beef and cigarettes are the main money-earners. The estimated profit for the week was $10 and home consumption from the store amounted to $12.35, which was higher than the profit but which could be met easily by proceeds from trucking. Nothing was given away as gifts or contributions.

The fifth store (column 5) is owned by a woman the members of whose household earn regular wages elsewhere in the town. The building materials for the store (108 square feet) are metal sheets and it had operated for just over two years. It has no refrigeration so does not sell beef or

mutton. The main sale item was cigarettes, followed by corned beef and bread. In fact, the value of cigarette sales was almost twice that of the combined value for bread and corned beef, the next two big sellers. Many of the cigarettes were sold to boys attending a church junior secondary school almost exactly across the street from the store. After the credit transactions are deducted from the total sales, profit for the week amounted to $9. The household consumption from the store was $8.63, just within the profit margin. This was, however, wiped out by the $8.93 worth of goods given away to relatives on request.

The sixth Nuku'alofa store is one with less than 100 food items. This store, which was only one year old in early 1976, is owned by a middle-aged widow with seven children, all of school age. Her late husband was a ship's captain earning a good salary. Following his death in 1974, a lump sum of $2000 was paid to the widow as pension. Using this money, she finances her store with the view to getting goods wholesale for the needs of her family. She says that once the pension money is gone she will most probably have to close down the store because it is not making a profit. The total turnover for the week was only $31.13. Household consumption, which totalled $9, was three times the estimated profit earned. Gifts to relatives, especially to in-law relatives, amounted to $3.81. Like many other stores of its size and operation, this one is due to expire at any time.

The seventh store (Tables 2.39-2.40 column 1) is a medium-sized rural establishment located in a large village. The owner is a man who runs a bus service and manages an estate. He also earns money from selling produce in the Nuku'alofa market. This wooden store of 560 square feet has a separate storage area and refrigeration. It has been operating uninterruptedly for twenty-five years. Three members of the owner's household work in the store as unpaid assistants. They mind the store in a group or in turn, depending on how busy it is.

In the week of the survey, the store opened for only five days; it was closed on the Saturday because of the death and funeral of the owner's son. The turnover of the store from Monday to Friday was only a dollar more than that of its equivalent in Nuku'alofa (Table 2.37 column 2) over the same five-day period. Had the store opened on Saturday, its turnover for the week would have been similar to its

Nuku'alofa counterpart. Beef brisket, the largest sale item, comprised 41 per cent of the total food sales and 20 per cent of the total weekly turnover. Cigarettes and tobacco ranked next, followed by bread and corned beef. Discounting tobacco products, the sale of non-foods amounted to 33 per cent of the total turnover for the weeek.

Credit sales for the week accounted for 21 per cent of the total sale, a substantial amount in comparison with the store's counterpart at Nuku'alofa. It is probable that being situated in a village the store cannot resist granting credit with the same ease as similar stores in Nuku'alofa. Discounting the credit sales, the estimated profit for the store for its five-day operation was $31. Household consumption from the store was negligible, but the funeral wiped out any profit made. The following is the list of goods used on the day of the funeral to cater for the mourners and for the burial preparation.

Table 2.41

Storekeeper's contributions to funerals

Food	Value ($)	Non-food	Value ($)
34 lbs sugar	5.78	clothing	5.50
18½ lbs butter	13.86	thread	0.20
29½ loaves bread	5.90	nails	0.68
1 bag flour	17.60	soap powder	0.51
2 tins baking powder	1.00	twine	0.88
1 pkt and 1 tin milk	1.30	toilet paper	0.28
5 pkts cocoa	1.45	total (non-food)	8.05
18½ lbs beef brisket	5.31		
1 tin luncheon meat	0.38	Total	60.75
1 lb salt	0.12		
total (food)	52.70		

Nor were these the only expenses for the funeral. Mourners normally stay at the bereaved family's home for a week or more and each day they must be fed, not uncommonly better but more than they would normally get at home. On the day of a funeral the bereaved family, especially a highly-placed member like the storekeeper who was also a district officer, slaughter pigs and often cattle for the occasion.

I have already mentioned elsewhere the case of a storekeeper who had to close her business following two successive funerals which wiped out her small store. Funerals mean death of human beings; they also toll the knell for shaky stores. The large quantity of butter on the list above was for dozens of loaves of bread brought by mourners. The bag of flour went, as usual, for making fried scones and dumplings of sorts (balls of flour mixed with grated coconut and boiled) - two terrible though favoured breakfast foods for many people. That cocoa rather than tea was removed from the store indicates the local preference for the former. As shown on Table 2.34, virtually all the tea sold during the week was in Nuku'alofa. Rural dwellers seem to prefer cocoa, especially during a big gathering: cocoa, thickened with condensed milk and a ton of sugar, provides a favourite dip for chunks of bread. As I have stated elsewhere, Tongans do not generally take as much beverage as in other countries; they take hot drinks mainly during large gatherings such as funerals, weddings or afternoon tea feasts. Men, of course, prefer kava and/or beer.

The owner of store eight (Tables 2.39-2.40 column 2) is a man who earns a regular income from farming and from transportation. The store is registered in the name of the wife of the owner's son (who works overseas, so that remittance is an additional source of cash income). The store, a metal-sheet building of about 280 square feet, equipped with a refrigerator kept in a separate room, had been in operation without interruption for eight years and is obviously the most prosperous-looking store in the village. The store is minded by two members of the owner's household who, of course, receive no pay other than keep for their labour of fifteen hours a day, six days a week. But this does not mean that the doors of the store are open for fifteen hours. As in many other stores, people stay around the house and are prepared to serve customers who call during the specified opening hours.

The week's sale of food accounts for 60 per cent of total sales. Tobacco products, comprising 22 per cent of total sales, were the best selling item, followed by beef brisket (21 per cent), bread and mutton flap. Thirty-six per cent of total sale was on credit. When this is taken off the estimated profit for the week was $17. Taking credit into account, the profit rises to $26. Whatever the case, the household consumption of $10.92 was well within the profit

margin. Not a single item was given away to relatives or as contribution to anything.

The ninth store is in a large village and owned by a middle-aged man whose other sources of income include raising pigs for sale and market gardening. The wife weaves baskets and other items which she sells to tourists on boat days. The store stands on a side street and caters for a substantial part of the village because it has no competitor close by. The material for the 200-square-foot building is metal sheets. The store has a refrigerator and a freezer, and was six months old in early 1976. The owner's wife manages it alone, fourteen hours a day for a six-day week.

The sale of food comprised 61 per cent of total sales. Beef brisket sold best (23 per cent of total sales), followed by tobacco products (21 per cent), mutton flap, and bread. Fifty-four per cent of total sales for the week were on credit, which sounds ominous for a new store. After the credit sales are taken off, the estimated net profit for the week amounts to $9. With credits included, the profit goes up to about $20. Household consumption from the store was $13.23, and not a single item was given away.

The tenth store is owned by an elderly villager who has no other source of cash income. Located in the centre of the village, the metal-sheet store (150 square feet) has a small storage room but no refrigeration as electricity has not reached this out-of-the-way settlement. The store has been operated by the owner, with the assistance of another member of his household, for five years without interruption. It is one of the very few stores in the country which keeps records of any kind. The store also operates with a relatively low credit-giving rate (only about 14 per cent of the total turnover). This in part accounts for its longevity. Cigarettes sold best with 30 per cent of the total, followed by bread, corned beef and beef brisket. Brisket ranks lower than corned beef because, as we have seen, the store lacks refrigeration. The owner bought one carton of brisket on Saturday from Nuku'alofa for $34.08, and sold only $11.40 of it. Had the village had electricity, he would have taken the remainder to a freezer, as people often do, or he could have resorted to the illegal technique of salting the remainder, again as people sometimes do.

The store's estimated profit, after credit sales were deducted, was $9. However the household consumption of $15.74, and give-away items which came to $3.52 in addition to contributions to two funerals totalling $40.00 made nonsense of the weekly profit. Half the contribution to funerals went to the funeral which I have described above (store seven). The owner of the seventh store is the father of number ten's son's wife.

The weekly sales of the tenth store point to an interesting feature of bread sales in Tongatapu. In the recent past people contributed native foods for the mourners at funerals. Today, contribution in terms of bread - one or two dozen loaves - is an acceptable substitute, since it is more convenient and cheaper to send bread than native foods, as the latter were usually accompanied by meat. During the week of the survey, the tenth store, because of the funeral in the village, sold about twice as much bread as any other in the sample except for the two biggest stores in Nuku'alofa (Tables 2.37 and 2.39). But as we have seen, although this store sold more bread than usual, the owner lost much more because of his contributions to this funeral and to that of his relatives-in-law in another village. As far as bread is concerned, the owner contributed thirty-five loaves of bread to the funeral in his village, and fifty-five loaves to that of his relatives-in-law. Funerals, in short, keep Tongan bakeries alive.

The owner of the eleventh store is a middle-aged man whose wife works as a government primary school teacher. The owner divides his time between working on his land (from which he derives income through selling banana, copra and produce at the Nuku'alofa market) and running the store. The 200-square-foot metal-sheet store has no refrigeration because of the lack of electricity in the village. The store operates six days a week from seven to eight in the morning and from four to eight in the evening. The owner spends the hours in between on his land. Although the store has operated for eight years, the owner says that he makes hardly any profit and has often considered closing down. His problem is that since his wife is teaching and his children are at school, he has to divide his time between farming and store-keeping, finding it difficult to perform satisfactorily in either.

Food made up 56 per cent of total sales. Beef brisket sold best with 14 per cent, followed by bread (10 per cent). However, cigarettes outranked them at 17 per cent. Sixteen per cent of total sales was on credit which is relatively low by rural standards. When credit sales are deducted from the total sales for the week, the estimated profit was $12, too low to cover the household consumption of $26.03 and give-aways totalling $2.37. The owner said that his wife's salary made up for the loss, a most peculiar although widespread way of reasoning among storekeepers.

The twelfth store represents the very small rural establishments. It is owned by a twenty-six-year-old government primary school teacher who derives further income from market gardening and the sale of banana and copra for export. The 100-square-foot store has no refrigeration and was only two months old at the time of the general survey. The owner opens it only after school hours, and all day on Saturday, when he makes half his total turnover. The owner himself operates the store.

The sale of cigarettes (47 per cent of total sales) from this store was considerably more than the sale of all food. After credit, the estimated profit for the week amounted to $4, significantly less than the household consumption of almost $14. Nothing was given away, probably because there was not much in stock to begin with. This store is obviously one of those established by regular income earners for the purpose of reducing their expenses.

The above analysis of the weekly sales of twelve Tongatapu stores highlights the problems faced by small-scale retail establishments in the Kingdom. The scale of operation of most of them is microscopic, and the demands of tradition sit heavily on storekeepers. Very few can combat these demands, for their society is founded on the kinds of relationships that give rise to sentiments which militate against an all-out individual drive for the accumulation of personal wealth. Retailing in Tonga is essentially a dream about unattainable wealth, and on the part of those who establish trade stores primarily for saving money, a fantasy about defeating an apparently unbeatable system. In the final analysis everyone loses: the storekeeper, the customer, and Tonga. The winners, like God and His Angels, are somewhere out there, unseen and unconcerned.

Table 2.1

Licensed stores in Tongatapu, 1974 to early 1976

Location	Stores in operation[a]	Stores closed[b]	Total
Nuku'alofa	259	104	363
Central District[c]	40	24	64
Eastern District	97	53	150
Western District	59	38	97
Total	455	219	674

Notes: a Stores in operation early in 1976, irrespective of when they were first registered.

b Stores which ceased operation at any time during the period 1974 to early 1976, irrespective of when they were first registered.

c Excluding Nuku'alofa.

Source: Trading licences, Inland Revenue.

Table 2.2

Area of trade stores

Size (sq. ft)	Number of stores	Percentage of stores
001-100	34	8.2
101-200	199	47.7
201-300	128	30.7
301-400	23	5.5
401-500	13	3.1
501-900	13	3.3
>900	7	1.3
Total	417[a]	100.0

Note: a Information unavailable for 8 other cases.

Source: General survey of stores, 1976.

Table 2.3

Construction material of trade stores

Construction material	Number of stores	Percentage of stores
Metal sheet	183	46.5
Wood	155	39.3
Concrete	56	14.2
Total	394[a]	100.0

Note: a Information unavailable for 31 other cases.

Source: General survey of stores, 1976.

Table 2.4

Type of ownership of stores

Type of ownership	Number of stores
Registered private company	4
Individual family	409
Co-operative and other group ownership	6
Total	419[a]

Note: a Information unavailable for 6 other cases.

Source: General survey of stores, 1976.

Table 2.5

Additional trading licences and their district distribution

Location	Bread vending	Meat selling	Bread and meat selling	No additional licences
Tongatapu				
Nuku'alofa	25	6	113	2
Central District[a]	8	-	16	4
Eastern District	16	5	38	7
Western District	12	1	10	1
Ha'apai				
Pangai	-	2	2	1
Other areas	-	6	-	18
Vava'u				
Neiafu	1	2	11	1
Other areas	6	7	6	12
Total[b]	68	29	196	46

Notes: a Excluding Nuku'alofa.

b N = 339. Information unavailable for 86 other cases.

Source: General survey of stores, 1976.

Table 2.6

Ethnicity of trade store owners

Ethnic group	Number of owners	Percentage of owners
Tongan	391	93.5
Part-European	23	5.5
European	1	0.2
Other	3	0.7
Total	418[a]	100.0

Note: a Information unavailable for another 7 cases.

Source: General survey of stores, 1976.

Table 2.7

Sex of registered store owner

Location	Male	Female
Tongatapu		
Nuku'alofa	92	92
Central District[a]	20	10
Eastern District	55	19
Western District	17	20
Ha'apai		
Pangai	10	2
Other areas	30	7
Vava'u		
Neiafu	14	1
Other areas	24	4
Total[b]	262	155

Notes: a Excluding Nuku'alofa.

b N = 417. Information unavailable for 8 other cases.

Source: General survey of stores, 1976.

Table 2.8

Age distribution of trade store owners

Location	<20	20-29	30-39	40-49	50-59	>60
Tongatapu						
Nuku'alofa	9	30	56	52	21	5
Central District[a]	2	3	7	11	7	-
Eastern District	7	8	18	20	12	8
Western District	3	7	5	13	5	2
Total	21	48	86	96	45	15
Ha'apai						
Pangai	-	2	4	2	2	2
Other areas	-	1	19	7	6	4
Vava'u						
Neiafu	-	-	2	7	5	1
Other areas	-	2	10	7	7	2
Total[b]	21	53	121	119	65	24

Notes: a Excluding Nuku'alofa.

b N = 403. Information unavailable for 22 other cases.

Sources: General survey of stores, 1976.

Table 2.9

Educational level attained by storekeepers

Location	Primary	College	Higher
Tongatapu			
Nuku'alofa	33	121	6
Central District[a]	10	13	-
Eastern District	11	52	2
Western District	8	26	-
Ha'apai			
Pangai	2	9	1
Other areas	13	24	-
Vava'u			
Neiafu	6	9	-
Other areas	11	16	-
Total[b]	94	270	9

Notes: a Excluding Nuku'alofa.
b N = 373. Information unavailable for 52 cases.

Source: General survey of stores, 1976.

Table 2.10

Distribution of stores which provide the only source of income for storekeepers and their families

Location	Number of stores
Tongatapu	
Nuku'alofa	11
Central District[a]	2
Eastern District	2
Western District	1
Ha'apai	
Pangai	2
Other areas	-
Vava'u	
Neiafu	1
Other areas	1
Total	20

Notes: a Excluding Nuku'alofa.

b The total number of stores for which this information is available is 391, so that the percentage of storekeepers and families for whom the store is the only source of income is 5.

Source: General survey of stores, 1976.

Table 2.11

Other sources of store-owner's own income by location of store

Other sources of own income	Tongatapu				Ha'apai		Vava'u		Total
	Nuku'alofa	Central District[a]	Eastern District	Western District	Pangai	Other areas	Neiafu	Other areas	
Agriculture[b]	13	8	28	11	11	27	-	11	109
Agriculture + other[c]	5	-	4	3	-	5	2	7	26
Overseas remittances	5	1	4	1	-	-	-	-	11
Overseas remittances + other[d]	4	-	-	1	-	-	-	-	5
Self-employment, non-agriculture[e]	20	2	5	4	-	-	-	-	31
White-collar wage employment[f]	18	3	5	3	-	-	-	1	30
Blue-collar wage employment[g]	12	2	-	1	-	-	3	2	20
Miscellaneous[h]	13	1	7	-	1	3	7	4	36
Total	90	17	53	24	12	35	12	25	268
No other source of owner's own income	71	13	21	10	-	2	2	4	123
No answer given									34

Notes: a Excluding Nuku'alofa.

b Includes cash cropping (the production of copra, bananas and vanilla for export); vegetable production for export; market vending (self-production and sale of vegetables at local market); or combinations of these.

c 'Other' includes overseas remittances, transportation, and skilled and unskilled labour.

d 'Other' includes transportation and semi-skilled labour, but excludes 14 cases already included in 'Agriculture + other'.

e Includes production and sale of handicrafts, transportation ownership, fishing, bakery and billiard table ownership.

f Includes clerical, school teaching, legal, medical and para-medical professional.

g Includes unskilled, semi-skilled and skilled labour.

h Includes other sources or combinations not already listed.

Source: General survey of stores, 1976.

Table 2.12

Ways in which store-owners use agriculture to earn own extra income

Extra income sources	Tongatapu				Ha'apai		Vava'u		Total
	Nuku'alofa	Central District[a]	Eastern District	Western District	Pangai	Other areas	Neiafu	Other areas	
Copra/bananas/vanilla export (C/B/V)	8	4	8	7	10	27	-	6	70
Vegetable export (Veg.)	-	1	1	-	-	-	-	1	3
Market vending (Market)	3	2	10	2	-	-	-	1	18
C/B/V + Veg.	-	-	-	1	1	-	-	2	4
C/B/V + Market	2	-	8	1	-	-	-	1	12
Veg. + Market	-	1	1	-	-	-	-	-	2
C/B/V + other[b]	3	-	1	2	-	5	2	3	16
Market + other[c]	2	-	2	-	-	-	-	3	7
C/B/V + Market + other[d]	-	-	1	1	-	-	-	1	3
Total	18	8	32	14	11	32	2	18	135

Notes: a Excluding Nuku'alofa.

b 'Other' includes overseas remittances, transportation, and skilled and unskilled labour.

c 'Other' includes overseas remittances and transportation.

d 'Other' is overseas remittances.

Source: General survey of stores, 1976.

Table 2.13

Other sources of store-owner's family income by location of store

Other sources of income for family	Tongatapu				Ha'apai		Vava'u		Total
	Nuku'alofa	Central District[a]	Eastern District	Western District	Pangai	Other areas	Neiafu	Other areas	
Agriculture[b]	5	3	14	6	-	5	-	2	35
Agriculture + other[c]	8	1	3	5	-	-	-	-	17
Overseas remittances	23	5	5	3	-	-	2	4	42
Overseas remittances + other[d]	6	4	-	1	-	-	-	-	11
Self-employment, not agriculture[e]	8	-	11	4	-	-	1	2	26
White-collar wage employment[f]	25	3	7	2	3	3	-	4	47
White-collar wage employment + other[g]	1	-	-	-	1	-	-	-	2
Blue-collar wage employment[h]	12	-	3	-	-	-	-	2	17
Miscellaneous[i]	11	3	2	2	2	2	-	-	22
Total	99	19	45	23	6	10	3	14	219
No other source of income for owner's family	62	11	29	11	6	27	12	14	172
No answer given									34

Notes: a Excluding Nuku'alofa.
b Includes production of copra, bananas and vanilla for export, and market vending (i.e. growing and taking own agricultural produce to market for sale), or a combination of these two.
c 'Other' includes overseas remittances, clerical and skilled labour.
d 'Other' includes clerical and professional, and skilled labour, but excludes 9 cases included in 'Agriculture + other'.
e Includes production and sale of handicrafts, transportation and ownership of a billiard table.
f Includes clerical, school teaching, legal, medical and para-medical professional.
g 'Other' includes skilled labour, but excludes 3 cases included in 'Agriculture + other' and 8 cases in 'Overseas remittances + other'.
h Includes unskilled, semi-skilled and skilled labour, and ship's crew.
i Includes pension and other sources or combinations not already listed.

Source: General survey of stores, 1976.

Table 2.14

Full- or part-time workers in trade stores

	Number of stores		Number of workers per store	Total number of workers	
Full-time	30		1	30	
	7		2	14	
	2		3	6	
	2	% of stores	4	8	% of workers
	41	(10.0)		58	(9.0)
Part-time	130		1	130	
	201		2	402	
	22		3	66	
	3		4	12	
	1		6	6	
	357	(90.0)		616	(91.0)

Note: Information unavailable for 30 stores. Of the 425 stores, 354 used no full-time workers and 38 used no part-time workers.

Source: General survey of stores, 1976.

Table 2.15

Paid and unpaid workers in trade stores

	Number of stores		Number of workers per store	Total number of workers	
Paid relatives	20		1	20	
	4		2	8	
	1		3	3	
	1	% of stores	4	4	% of workers
	26	(7.0)		35	(5.2)
Paid non-relatives	6		1	6	
	3		2	6	
	1		3	3	
	1		4	4	
	1		6	6	
	12	(3.0)		25	(3.7)
Unpaid relatives	134		1	134	
	200		2	400	
	22		3	66	
	3		4	12	
	359	(90.0)		612	(91.0)
Unpaid non-relatives	1	(0.3)	2	2	(0.3)

Note: Information unavailable for 18 stores. Of the 425 stores, 368 said they employed no paid relatives, 393 no paid non-relatives, 39 no unpaid relatives and 406 no unpaid non-relatives.

Source: General survey of stores, 1976.

Table 2.16

Daily hours of operation of trade stores

Hours of operation	Number of stores	Percentage of stores
<2	2	0.5
2- 4	27	6.6
5- 6	16	3.9
6- 8	73	17.8
8-10	79	19.3
10-12	41	10.0
>12	162	39.5
other	10	2.4
Total	410[a]	100.0

Note: a Information unavailable for 15 stores.

Source: General survey of stores, 1976.

Table 2.17

Length of operation of Tongan trade stores (years)

Location	0-1	2-3	4-6	7-10	11-20	21-30	31-50	51+
Tongatapu								
Nuku'alofa	71	32	39	23	12	1	-	1
Central District[a]	13	8	5	3	1	-	-	-
Eastern District	24	16	16	12	3	3	1	-
Western District	11	6	10	3	3	1	-	-
Total[b]	119	62	70	41	19	5	1	1
Ha'apai								
Pangai	2	3	2	2	2	1	-	-
Other areas	5	14	9	6	-	1	1	-
Vava'u								
Neiafu	-	5	6	1	1	-	-	-
Other areas	11	8	8	2	2	-	-	-
Total[c]	137	92	95	52	24	7	2	1
Total (% of stores)	33.4	20.0	23.2	12.7	8.3	1.7	0.5	0.2

Notes: a Excluding Nuku'alofa. b N = 318
c N = 410. Information unavailable for 15 stores.
Source: General survey of stores, 1976.

Table 2.18

Food as a proportion of total stock

Location	<25% No. of stores	<25% % of stores	25-50% No. of stores	25-50% % of stores	>50% No. of stores	>50% % of stores[a]
Tongatapu						
Nuku'alofa	43	27.5	19	12.2	94	60.3
Central District[b]	6	30.0	4	20.0	10	50.0
Eastern District	18	32.1	15	26.8	23	41.1
Western District	18	60.1	6	20.0	6	20.0
Ha'apai						
Pangai	1	7.7	7	53.9	5	38.3
Other areas	4	11.1	17	47.2	15	41.7
Vava'u						
Neiafu	1	6.7	3	20.0	11	73.3
Other areas	-	-	11	35.5	20	64.5
Total[d]	91	25.7[c]	82	23.2[c]	184	52.0[c]

Notes: a Expressed as a percentage of the number of stores for that location.
b Excluding Nuku'alofa.
c Expressed as percentage of total number of stores.
d N = 357. Information unavailable for 68 stores.

Source: General survey of stores, 1976.

Table 2.19

Stores with and without storage space

Location	Number with storage space	Number without storage space
Tongatapu		
Nuku'alofa	24	116
Central District[a]	2	24
Eastern District	13	57
Western District	-	34
Ha'apai		
Pangai	2	10
Other areas	1	32
Vava'u		
Neiafu	5	10
Other areas	2	29
Total[b]	49 (14%)	312 (86%)

Notes: a Excluding Nuku'alofa.
b N = 361. Information on storage space unavailable for 64 stores.

Source: General survey of stores, 1976.

Table 2.20

Size of food inventory

Location	<100 items		100-500 items		500-1000 items		>1000 items	
	No. of stores	% of stores	No. of stores	% of stores	No. of stores	% of stores	No. of stores	% of stores
Tongatapu								
Nuku'alofa	39	24.7	105	66.5	9	5.7	5	3.2
Central District[b]	6	27.2	15	68.2	1	4.6	-	-
Eastern District	7	10.1	41	59.4	20	29.0	1	1.5
Western District	10	29.4	21	61.8	3	8.8	-	-
Ha'apai								
Pangai	3	23.1	8	61.5	2	15.4	-	-
Other areas	22	59.5	14	37.8	1	2.7	-	-
Vava'u								
Neiafu	1	6.7	11	73.3	2	13.3	1	6.7
Other areas	18	58.1	13	41.9	-	-	-	-
Total[c]	106	28.0[d]	228	60.2[d]	38	10.0[d]	7	1.8[d]

Notes: a Expressed as a percentage of the number of shops for that location.
b Excluding Nuku'alofa.
c N = 379. Information on food inventory unavailable for 46 stores.
d Expressed as a percentage of the total number of shops for which information is available.

Source: General survey of stores, 1976.

Table 2.21

Position of town stores by store size (inventory)

Position of store	Very small[a]	Small[b]	Medium[c]	Large[d]	Total
Main business centre	3	15	2	1	21
Major street corner	1	12	2	1	16
Facing a major street	21	53	5	3	82
Facing a minor street	14	35	3	1	53
Other	2	4	-	-	6
Total	41	119	12	6	178[e]

Notes: a Less than 100 items.

b 100-500 items.

c 500-1000 items.

d More than 1000 items.

e N = 213. Information unavailable for 35 stores.

Source: General survey of stores, 1976.

Table 2.22

Position of village stores by store size (inventory)

Position	Very small[a]	Small[b]	Medium[c]	Large[d]	Total
Centre of village	25	37	6	-	68
On main road	17	43	13	1	74
On a side street	18	19	6	-	43
Other	3	2	-	-	5
Total	63	101	25	1	190[e]

Notes: a Less than 100 items.

b 100-500 items.

c 500-1000 items.

d More than 1000 items.

e N = 212. Information unavailable for 22 stores.

Source: General survey of stores, 1976.

Table 2.23

Stores with and without refrigerators and freezers

Location	Number with refrigerator	Number without refrigerator	Number with freezer	Number without freezer
Tongatapu				
Nuku'alofa	115	21	84	80
Central District[a]	15	14	6	22
Eastern District	32	40	6	47
Western District	15	16	24	25
Ha'apai				
Pangai	5	8	1	12
Other areas	3	34	-	37
Vava'u				
Neiafu	4	11	14	1
Other areas	2	29	-	31
Total[b]	191	173	135	255

Notes: a Excluding Nuku'alofa.

b Information unavailable for refrigeration in 35 cases; about freezer in 61 cases.

Source: General survey of stores, 1976.

Table 2.24

Food and drink sales as a proportion of total sales
(number of stores)

Location	0-19%	20-39%	40-59%	60-79%	80-100%
Tongatapu					
Nuku'alofa	7	37	28	56	18
Central District[a]	-	4	5	12	-
Eastern District	1	15	16	23	1
Western District	3	14	2	9	1
Ha'apai					
Pangai	-	1	3	7	2
Other areas	1	1	9	16	10
Vava'u					
Neiafu	-	-	1	11	3
Other areas	1	-	10	12	8
Total[b]	13	72	74	146	43
% of stores	3.7	20.7	21.3	41.9	12.4

Notes: a Excluding Nuku'alofa.

b N = 348. Information unavailable for 77 cases.

Source: General survey of stores, 1976.

Table 2.25

Percentages of stores (grouped according to food and drink sales as proportion of total sales)

Location	0-19%	20-39%	40-59%	60-79%	80-100%
Nuku'alofa	4.8	25.3	19.2	38.4	12.3
Rural Tongatapu	3.8	31.1	21.7	41.5	1.9
Ha'apai	2.1	2.1	23.9	47.9	23.9

Source: General survey of stores, 1976.

Table 2.26

Value of food commodities in all stores by wholesale suppliers[a]

Wholesale supplier	Value ($) of foodstuff	Percentage of total value
J (European trader)	14,532	25.3
M (Overseas firm)	13,493	23.5
T (Tongan trader)	10,991	19.1
B (Overseas firm)	6,277	10.9
A (European trader)	3,168	5.5
S (Tongan trader)	1,563	2.7
L (Tongan trader)	1,036	1.8
34 Other suppliers	4,833	8.4
Self-importing	1,546	2.7
Total	57,439	100.0

Note: a This total does not include $7160, the value of food stock which the supplier has not specified.

Source: General survey of stores, 1976.

Table 2.27

Value of food commodities in stores by suppliers and by location of supplying branch

Wholesale supplier	Location of supplying branch	Value ($) of foodstuff
Tongatapu		
J (European trader)	Nuku'alofa	11,146
T (Tongan trader)	Nuku'alofa	10,495
M (Overseas firm)	Nuku'alofa	9,986
B (Overseas firm)	Nuku'alofa	4,523
A (European trader)	Mu'a	3,168
S (Tongan trader)	Nuku'alofa	1,563
L (Tongan trader)	Nuku'alofa &Mu'a	1,018
28 other suppliers	Nuku'alofa & rural Tongatapu	4,571
Self-importing	-	35
Total		46,505
Ha'apai		
M (Overseas firm)	Pangai	2,160
B (Overseas trader)	Nuku'alofa	761
J (European trader)	Nuku'alofa	1,786
T (Tongan trader)	Nuku'alofa	496
M (Overseas firm)	Nuku'alofa	327
B (Overseas firm)	Nuku'alofa	1
2 other suppliers	Nuku'alofa	27
Self-importing	-	4
Total		5,562
Vava'u[a]		
J (European trader)	Neiafu	1,600
M (Overseas firm)	Neiafu	1,020
B (Overseas firm)	Neiafu	992
L (Tongan trader)	Neiafu	18
4 other suppliers	Neiafu	235
Self-importing	-	1,507
Total		5,372

Note: a Nearly $1000 worth of goods in Vava'u stores could not be traced to the suppliers because of the absence of the owners at the time of the survey.

Source: General survey of stores, 1976.

Table 2.28

Value of food types stocked in all trade stores

Food type	Value ($)	Type total as % of total value
Flour and flour preparations[a]		
flour	2,430	
bread	825	
cabin and savoury biscuits, imported	1,036	
cabin biscuits, local	679	7.7
Other cereals		
rice	382	0.6
Meat and eggs		
corned beef, tinned	12,996	
meat loaf, tinned	4,123	
stews, tinned	188	
fish, tinned	6,245	
beef brisket, frozen	707	
beef, corned	26	
beef, fresh local	4	
mutton flap	2,744	
chicken, local	108	
pork, local	6	
eggs, imported	3	
eggs, local	251	42.6
Beverages[b]		
tea	815	
coffee	830	
ovaltine	22	
milo	666	
cocoa	1,131	5.4
Dairy products		
milk, powdered	304	
milk, condensed and evaporated	1,612	
milk, fresh local	3	
butter, tinned	308	
butter, wrapped	2,077	
cheese	304	7.2
Spreads[c]		
jam	1,356	
margarine	74	
golden syrup	6	
honey, local	6	
vegemite	160	
peanut butter	71	2.6
Condiments & spices		
sugar	9,453	
salt	862	
curry powder	1,329	
onions, imported	838	
onions, local	8	
other spices	1	19.4
Cooking aids		
dripping	1,924	
cooking oil	35	3.0
Fruits & vegetables[d]		
vegetables, tinned and bottled	262	
fruit, tinned	1,033	
potatoes, imported	7	
potatoes, local	13	2.0
Sweets and cakes		
cake and cake mixes	362	
sweet biscuits	1,165	
sweets[e]	1,789	5.2
Drinks		
soft drinks, imported	210	
soft drinks, local	1,504	2.7
Miscellaneous		
baby foods	784	
soup, tinned	82	
peanuts, tinned	108	
peanuts, local	1	
kava, local	33	1.6

Notes: a Excluding cakes, which are included in 'Sweets and cakes'.
b Excluding soft drinks, which are in the category 'Drinks'.
c Excluding butter, which is included in 'Dairy products'.
d Excluding onions, which are included in 'Condiments & spices'.
e Includes lollies and chewing gum.

Source: General survey of stores, 1976.

Table 2.29

The ten greatest-sale food types[a] (ranked by value) for 26 Tongatapu stores[b] over one week

Rank (sales)	Food item	Value sold ($)	Rank (stocks)
1	Beef brisket	1,106	24
2	Bread	587	21
3	Mutton flap	351	5
4	Corned beef, tinned	203	1
5	Sugar	167	2
6	Flour	125	6
7	Butter	122	7
8	Soft drinks[c]	105	11,34
9	Sweets	81	9
10	Milk[d]	79	10,31,54
	Total	2,926	

Notes: a These 10 items, out of a total of 50, account for 84% of the total sales for the week.

b Number of Nuku'alofa stores = 12.
Number of rural stores = 14.

c Includes imported and local soft drinks.

d Includes all types, but sales are mostly of tinned condensed and evaporated milk.

Source: Study of selected stores, October 1976.

Table 2.30

Food types stocked in all trade stores ranked by value

Rank	Food type	Value ($)	Rank	Food type	Value ($)
1	corned beef, tinned	12,996	29	butter, tinned	308
2	sugar	9,453	30	cheese	304
3	fish, tinned	6,245	31	milk, powdered	304
4	meat loaf, tinned	4,123	32	vegetables[b]	262
5	mutton flap	2,744	33	eggs, local	251
6	flour	2,430	34	soft drinks, imported	210
7	butter, wrapped	2,077	35	stews, tinned	188
8	dripping	1,924	36	vegemite	160
9	sweets[a]	1,789	37	chicken, local	108
10	milk, condensed and evaporated	1,612	38	peanuts, tinned	108
11	soft drinks, local	1,504	39	soup, tinned	82
12	jam	1,356	40	margarine	74
13	curry powder	1,329	41	peanut butter	71
14	sweet biscuits	1,165	42	cooking oil	35
15	cocoa	1,131	43	kava, local	33
16	cabin and savoury biscuits, imported	1,036	44	beef, corned	26
			45	ovaltine	22
17	fruit, tinned	1,033	46	potatoes, local	13
18	salt	862	47	onions, local	8
19	onion, imported	838	48	potatoes, imported	7
20	coffee	830	49	golden syrup	6
21	bread	825	50	pork, local	6
22	tea	815	51	honey, local	6
23	baby foods	784	52	beef, fresh local	4
24	beef brisket, frozen	707	53	eggs, imported	3
25	cabin biscuits, local	679	54	milk, fresh local	3
26	milo	666	55	other spices	1
27	rice	382	56	peanuts, local	1
28	cake and cake mix	362		Total	64,301

Notes: a Including lollies and chewing gum.

b Tinned and bottled.

Source: General survey of stores, 1976.

Table 2.31

Variations in commodity prices in stores of different sizes and locations
Price or range of prices per selling unit

Commodity	Nuku'alofa					Rural Tongatapu			
	Very small[a]	Small[b]	Small-medium[c]	Medium[d]	Large[e]	Very small[a]	Small[b]	Small-medium[c]	Medium[d]
Flour and flour preparations									
flour, per lb.	16	15-17	14-15	16	14	16-18	16-17	14-15	16
bread, loaf	20	20	20	20	20	20	20	20	20
currant buns, ea.	-	-	4	4	4	4	4	4	4
fried scones, ea.	-	-	2	2	-	-	-	-	-
cabin biscuits, per lb.	-	28	28	44[f]	-	-	28-30	30-32	28
Other cereals									
rice, per lb.	-	-	24	-	25	-	-	-	20
weet-bix, per small pkt	-	-	-	45	-	-	46	-	46
rolled oats, per pkt	-	-	-	126	60	-	-	-	-
vermicelli, per pkt	-	-	-	45	-	-	-	-	70
Meats - tinned									
corned beef									
Pacific, 6 lb.	-	-	-	-	730	-	-	-	-
Pacific, 3 lb.	-	-	-	398	365	-	-	-	-
Pacific, 1 lb.	-	123	123	123	122	-	124	120-125	123
Pacific, 12oz.	-	93-98	95	95	92	94	95	95	93
Palm, 12oz.	-	85	85	85	84	90	85	84-88	85
K.R., 12oz.	-	55	55	52	-	-	-	58	-
camp pie	35	36	-	35	-	35-38	38-40	36-40	38
luncheon meat (pork)	30	30	26	26	25	25	25	28	-
stew	-	-	55	-	-	-	-	-	-
mackerel pike	43	-	-	-	-	-	37-43	55	-
Meats - frozen or fresh									
beef brisket, per lb.	-	29-30	25	28	26	-	26-30	28-30	29
mutton flap, per lb.	-	29	28	28	28	-	30	29-30	30
chicken, ea.	-	-	200	-	-	-	-	-	-
eggs, ea.	-	-	9-10	10	-	-	-	-	-

Table 2.31 (continued)

Commodity	Nuku'alofa					Rural Tongatapu			
	Very small[a]	Small[b]	Small-medium[c]	Medium[d]	Large[e]	Very small[a]	Small[b]	Small-medium[c]	Medium[d]
Beverages									
tea, per 1/4 lb.	37	34-35	35	35	34	39	32	35	-
coffee	-	-	-	90	-	-	-	175	-
milo	-	112	108-115	112	112	-	65	-	-
cocoa	-	34-37	-	36	36	35	32-35	34-35	29
Milk and milk products									
condensed	-	40-44	42	44	41	41-45	40-42	42-45	42
evaporated	-	32	-	33	30	-	39	-	-
powdered	-	65	-	-	-	-	-	-	-
fresh, per US pint	-	-	-	15	-	-	-	-	-
Glaxo	-	-	85	176	-	87	-	-	90
butter	56	56-60	56	56	56	-	56	54-64	56
cheese (processed)	-	48	-	48	-	-	-	-	-
Spreads, condiments									
jam	-	30	43	30	45	32-36	43	44	66
honey	-	52	-	67	-	-	-	-	-
vegemite	-	-	-	72	-	-	-	-	-
sugar	-	16-32	16-17	16	16	17-18	17-18	17-18	17
salt	12	12	12	12	12	12	12	12	12
curry powder, per oz.	5	5	5	5	5	5	5	5	5
onion, per lb.	-	18-20	17	16	16	-	20	-	20
other spices	-	-	-	48	-	-	-	-	-
tomato sauce	-	-	47	50	33	-	-	-	-
soya sauce	-	-	110	130	-	-	-	-	-
mayonnaise	-	-	-	100	-	-	-	-	-
Cooking aids									
dripping, per lb.	-	32-33	32	34	-	35	32-35	30-38	33
cooking oil	-	-	-	-	104	-	-	-	-
baking powder	-	24	26	22	25	25	-	23	-
yeast, per oz.	-	-	-	10	-	-	-	10	-
Fruit and vegetables									
fruit (tinned)	-	-	-	-	68	-	-	-	-
vegetables (tinned)	-	-	35	-	-	-	-	-	-
Sweets									
cake	46	45	45	-	45	-	-	-	46
sweet biscuits, per pkt	-	38	-	36	44	-	-	35	-
custard powder	-	-	-	53	-	-	59	-	-
jelly crystals	-	-	-	10	70	-	-	-	-
ice cream, cone	-	-	10	-	-	-	-	-	-
lollies, ea.	1	1	1	1	1	1	1	1	1
chewing gum	3-4	3-4	3	3	-	3	3	3	3

Table 2.31 (continued)

Commodity	Nuku'alofa					Rural Tongatapu			
	Very small[a]	Small[b]	Small-medium[c]	Medium[d]	Large[e]	Very small[a]	Small[b]	Small-medium[c]	Medium[d]
Soft drinks									
local	18	15-18	15-18	16	15	18-20	15-20	18	18-10
imported	-	-	-	23	23	-	-	-	23
cordial	-	33-37	35	-	33	-	30	-	-
Other									
twisties	15	10	10	15	15	-	12	12-15	15
peanuts	-	-	-	40	29	-	-	-	-
cigarettes	47	45	45	45	45	45-46	45-46	45-46	45
tobacco	-	76	76	75	74	88	76-80	80	76

Notes: a Fewer than 100 food items in stock.
b 100-350 items in stock.
c 350-700 items in stock.
d 700-1000 items in stock.
e More than 1000 food items in stock.
f Imported.

Source: Study of selected stores, October 1976.

Table 2.32

Value by type of daily sales over one week by 26 selected stores in Tongatapu: Nuku'alofa[a]
($)

Food (type)	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total
Flour and flour preparations							
flour	21.65	2.65	4.79	4.07	8.40	22.27	63.83
bread	64.65	56.05	64.75	51.30	56.00	69.25	362.00
currant buns	10.08	10.74	10.01	4.92	10.60	5.12	51.47
fried scones	1.10	0.03	1.28	0.72	2.49	0.25	5.87
cabin biscuits	6.26	2.04	4.36	1.45	2.44	11.06	27.61
Other cereals							
rice	-	-	0.65	-	0.75	1.85	3.25
weet-bix	0.90	-	-	-	-	0.45	1.35
rolled oats	1.26	-	-	-	1.83	2.28	5.37
vermicelli	-	-	1.73	-	-	2.30	4.03
Meats							
corned beef, tinned	14.04	14.24	9.34	9.81	18.71	49.98	116.12
meat loaf, tinned	2.63	2.29	1.01	1.32	2.38	3.55	13.18
stews, tinned	-	1.65	-	-	2.75	-	4.40
fish, tinned	0.86	2.42	1.29	0.43	1.72	0.86	7.58
beef brisket	88.04	93.59	75.20	74.29	205.00	322.81	858.93
mutton flap	33.05	12.74	25.12	16.76	14.31	137.82	239.80
chicken	4.00	5.50	4.60	2.30	14.70	11.80	42.90
eggs	4.25	3.87	6.80	3.80	2.69	11.53	32.94
Beverages							
tea	0.34	3.23	2.80	2.44	4.12	4.52	17.45
coffee	-	0.90	-	2.00	-	2.90	5.80
milo	2.90	-	0.66	1.78	1.12	2.27	8.73
cocoa	1.07	1.44	3.24	0.69	2.44	2.86	11.74
Dairy products							
milk	5.57	10.63	9.31	9.90	7.29	10.46	53.16
butter	14.48	10.92	14.19	12.47	15.43	23.85	91.34
cheese	0.11	0.48	1.92	-	-	0.48	2.99
Spreads							
jam	0.83	1.71	0.80	0.30	0.53	0.96	5.13
honey	-	-	-	-	0.67	1.19	1.86
vegemite	-	0.72	-	-	-	-	0.72

Table 2.32 (continued)

Food (type)	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total
Condiments							
sugar	22.71	10.17	10.79	9.72	12.85	29.49	95.73
salt	0.79	0.53	0.54	0.68	1.02	1.93	5.49
curry powder	0.40	1.40	1.55	1.25	0.70	1.85	7.15
onions	4.98	4.68	4.47	8.05	3.82	10.35	36.35
other spices	-	-	-	0.48	-	-	0.48
tomato sauce	-	-	0.33	1.27	-	1.56	3.16
soya sauce	-	-	2.00	-	-	3.30	5.30
mayonnaise	-	-	-	1.00	-	-	1.00
Cooking aids							
dripping	0.64	1.66	1.86	1.83	4.89	8.29	19.17
cooking oil	1.04	-	-	-	-	-	1.04
baking powder	0.43	0.22	0.24	-	0.98	2.77	4.64
yeast	5.52	1.63	0.90	1.00	2.08	5.12	16.25
Fruit and vegetables							
fruit, tinned	-	-	-	0.68	-	1.49	2.17
vegetables, tinned	0.35	-	-	-	-	-	0.35
Drinks							
soft drinks	11.23	9.41	6.90	6.97	11.17	17.62	63.30
Sweets							
cake	3.19	1.36	-	-	2.70	4.97	12.22
sweet biscuits	1.50	1.85	0.83	0.82	2.33	4.54	11.87
custard powder	0.53	-	-	0.53	0.53	0.53	2.12
jelly crystals	-	-	1.40	-	2.80	2.14	6.34
ice cream	0.40	0.30	0.10	0.60	0.60	2.70	4.70
lollies	9.08	5.57	8.05	5.98	8.50	8.45	45.63
Other							
twisties	1.88	1.47	3.45	1.50	3.50	2.75	14.55
peanuts	-	-	0.40	-	0.84	0.28	1.52
Total (foods)	342.74	278.09	287.66	243.11	435.68	812.80	2,400.08
Non-foods							
tobacco products	101.28	84.37	98.07	78.79	113.16	150.23	625.90
other	114.49	88.46	110.40	81.67	89.42	176.41	660.85
Total (non-food)	215.77	172.83	208.47	160.46	202.58	326.64	1,286.75
Total (all sales)	558.51	450.92	496.13	403.57	638.26	1139.44	3,686.83

Note: a Number of Nuku'alofa stores = 12.

Source: Study of selected stores, October 1976.

Table 2.33

Value by type of daily sales over one week by 26 selected stores in Tongatapu: rural[a]
($)

Food (type)	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total
Flour and flour preparations							
flour	8.07	10.12	11.41	10.66	10.60	9.91	60.77
bread	26.65	39.20	33.60	53.95	48.00	23.55	224.95
currant buns	0.48	2.26	4.32	1.44	3.08	2.58	14.16
fried scones	-	-	-	-	-	-	-
cabin biscuits	3.28	3.47	6.55	2.78	1.61	2.67	20.36
Other cereals							
rice	-	0.60	0.40	0.40	0.60	-	2.00
weet-bix	0.46	0.46	0.46	-	0.46	-	1.84
rolled oats	-	-	-	-	-	-	-
vermicelli	-	0.70	-	-	-	-	0.70
Meats							
corned beef, tinned	11.14	18.28	7.27	10.67	14.80	24.87	87.03
meat loaf, tinned	1.08	2.16	2.47	1.73	3.60	2.98	14.02
stews, tinned	-	-	-	-	-	-	-
fish, tinned	0.84	2.73	2.76	2.58	1.20	5.00	15.11
beef brisket	39.27	28.95	48.94	42.00	45.32	42.91	247.39
mutton flap	13.72	15.68	8.38	9.85	16.86	46.98	111.47
chicken	-	-	-	-	-	-	-
eggs	-	-	-	-	-	-	-
Beverages							
tea	-	0.32	-	-	0.65	-	0.97
coffee	-	-	1.75	-	-	0.85	2.60
milo	0.65	-	-	-	-	-	0.65
cocoa	1.62	0.67	0.78	1.85	1.51	2.60	9.03
Dairy products							
milk	3.42	5.73	6.69	4.67	3.45	1.74	25.70
butter	4.15	4.06	5.07	9.56	5.70	1.79	30.33
cheese	-	0.92	-	-	-	-	0.92
Spreads							
jam	1.42	0.69	1.02	-	-	-	3.13
honey	-	-	-	-	-	-	-
vegemite	-	-	-	-	-	-	-

Table 2.33 (continued)

Food (type)	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total
Condiments							
sugar	7.09	9.52	16.35	12.68	9.40	16.28	71.32
salt	1.20	1.38	1.45	2.66	2.34	3.98	13.01
curry powder	0.39	0.10	0.50	0.47	0.34	0.84	2.64
onions	0.55	0.95	0.65	0.40	0.83	0.45	3.82
other spices	-	-	-	-	-	-	-
tomato sauce	-	-	-	-	-	1.41	1.41
soya sauce	-	-	-	-	-	-	-
mayonnaise	-	-	-	-	-	-	-
Cooking aids							
dripping	2.14	4.21	2.64	6.08	3.86	2.12	21.05
cooking oil	-	-	-	-	-	-	-
baking powder	1.06	-	3.18	0.48	0.55	-	4.27
yeast	0.40	0.35	1.60	0.70	0.35	-	3.40
Fruit and vegetables							
fruit, tinned	-	-	-	-	-	-	-
vegetables, tinned	-	-	-	-	-	-	-
Drinks							
soft drinks	5.04	7.59	6.40	6.64	8.03	8.32	42.02
Sweets							
cake	0.23	-	-	-	-	-	0.23
sweet biscuits	-	0.40	0.35	0.39	-	-	1.14
custard powder	-	-	-	-	-	0.59	0.59
jelly crystals	-	-	-	-	-	-	-
ice cream	-	-	-	-	-	-	-
lollies	4.18	6.15	5.34	6.39	7.03	6.34	35.43
Other							
twisties	0.30	0.48	0.61	0.75	0.42	0.42	2.98
peanuts	-	-	-	-	-	-	-
Total (food)	138.83	168.13	179.94	189.78	190.59	209.18	1,076.45
Non-food							
tobacco products	69.93	67.09	78.41	74.99	93.96	86.97	471.35
other	72.94	58.65	65.85	84.94	86.75	60.52	429.65
Total (non-food)	142.87	125.74	144.26	159.93	180.71	147.49	901.00
Total (all sales)	281.70	293.87	324.20	349.71	371.30	356.67	1,977.45

Note: a Number of rural stores = 14.

Source: Study of selected stores, October 1976.

Table 2.34

Total value by type of sales over one week by 26 selected stores in Tongatapu: Nuku'alofa and rural stores

Food (type)	Nuku'alofa[a] ($)	Rural[b] ($)	Combined total ($)	% of total (all sales)
Flour and flour preparations				
flour	63.83	60.77	124.60	
bread	362.00	224.95	586.95	
currant buns	51.47	14.16	65.63	
fried scones	5.87	-	5.87	
cabin biscuits	27.61	20.36	47.97	
Total (category)	510.78	320.24	831.02	14.7
Other cereals				
rice	3.25	2.00	5.25	
weet-bix	1.35	1.84	3.19	
rolled oats	5.37	-	5.37	
vermicelli	4.03	0.70	4.73	
Total (category)	14.00	4.54	18.54	0.3
Meats				
corned beef, tinned	116.12	87.03	203.15	
meat loaf, tinned	13.18	14.02	27.20	
stews, tinned	4.40	-	4.40	
fish, tinned	7.58	15.11	22.69	
beef brisket	858.93	247.39	1,106.32	
mutton flap	239.80	111.47	351.27	
chicken	42.90	-	42.90	
eggs	32.94	-	32.94	
Total (category)	1,315.85	475.02	1,790.87	31.6
Beverages				
tea	17.45	0.97	18.42	
coffee	5.80	2.60	8.40	
milo	8.73	0.65	9.38	
cocoa	11.74	9.03	20.77	
Total (category)	43.72	13.25	56.97	1.0
Dairy products				
milk	53.16	25.70	78.86	
butter	91.34	30.33	121.67	
cheese	2.99	0.92	3.91	
Total (category)	147.49	56.95	204.44	3.6
Spreads				
jam	5.13	3.13	8.26	
honey	1.86	-	1.86	
vegemite	0.72	-	0.72	
Total (category)	7.71	3.13	10.84	0.2

Table 2.34 (continued)

Food (type)	Nuku'alofa[a] ($)	Rural[b] ($)	Combined total ($)	% of total (all sales)
Condiments				
sugar	95.73	71.32	167.05	
salt	5.49	13.01	18.50	
curry powder	7.15	2.64	9.79	
onions	36.35	3.83	40.18	
other spices	0.48	-	0.48	
tomato sauce	3.16	1.41	4.57	
soya sauce	5.30	-	5.30	
mayonnaise	1.00	-	1.00	
Total (category)	154.66	92.21	246.87	4.4
Cooking aids				
dripping	19.17	21.05	40.22	
cooking oil	1.04	-	1.04	
baking powder	4.64	4.27	8.91	
yeast	16.25	3.40	19.65	
Total (category)	41.10	28.72	69.82	1.2
Fruit and vegetables				
fruit, tinned	2.17	-	2.17	
vegetables, tinned	0.35	-	0.35	
Total (category)	2.52	-	2.52	0.0
Drinks				
soft drinks	63.30	42.02	105.32	1.9
Sweets				
cake	12.22	0.23	12.45	
sweet biscuits	11.87	1.14	13.01	
custard powder	2.12	0.59	2.71	
jelly crystals	6.34	-	6.34	
ice cream	4.70	-	4.70	
lollies	45.63	35.43	81.06	
Total (category)	82.88	37.39	120.27	2.1
Other				
twisties	14.55	2.98	17.53	
peanuts	1.52	-	1.52	
Total (category)	16.07	2.98	19.05	0.3
Total (food)	2,400.08	1,076.45	3,476.53	61.4
Non-food				
tobacco products	625.90	471.35	1,097.25	19.4
other	660.85	429.65	1,090.50	19.3
Total (non-food)	1,286.75	901.00	2,187.75	38.6
Total (all sales)	3,686.83	1,977.45	5,664.28	

Notes: a Number of Nuku'alofa stores = 12.
b Number of rural stores = 14.

Source: Study of selected stores, October 1976.

Table 2.35

Value of total daily sales over one week by 26 selected Tongatapu stores: Nuku'alofa and rural stores[a] ($)[b]

Sales totals	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Total
Total (food)							
Nuku'alofa	343	278	288	243	436	813	2,401
Rural	139	168	180	190	191	209	1,077
Combined	482	446	468	433	627	1,022	3,478
Total (tobacco products)							
Nuku'alofa	101	84	98	79	113	150	625
Rural	70	67	78	75	94	87	471
Combined	171	151	176	154	207	237	1,096
Total (other non-food)							
Nuku'alofa	114	88	110	82	89	176	659
Rural	73	59	66	85	87	61	431
Combined	187	147	176	167	176	237	1,090
Total (non-food)							
Nuku'alofa	216	173	208	160	203	327	1,287
Rural	143	126	144	160	181	148	902
Combined	359	299	352	320	384	475	2,189
Total (all sales)							
Nuku'alofa	559	451	496	403	639	1,140	3,688
Rural	282	294	324	350	372	357	1,979
Combined	841	745	820	753	1,011	1,497	5,667

Notes: a Number of Nuku'alofa stores = 12. Number of rural stores = 14.

b Values have been rounded to the nearest dollar.

Source: Study of selected stores, October 1976.

Table 2.36

Value of food imports ($)

Food and live animals	1969	1970	1971	1972	1973	1974
Live animals	4,158	3,127	8,307	16,352	5,722	44,846
Meat and meat preparations	440,556	553,385	521,209	689,655	688,747	1,363,459
Dairy products	124,251	157,059	168,669	187,680	219,478	240,073
Fish and fish preparations	96,264	74,484	150,500	94,711	167,778	366,301
Cereal and cereal preparations	389,381	348,329	340,323	453,489	695,968	836,008
Fruit and vegetables	35,276	45,932	48,961	47,427	61,891	75,578
Sugar, sugar preparations and honey	171,797	179,905	194,236	246,717	292,300	384,937
Coffee, tea, cocoa and spices	22,184	30,054	32,896	31,796	33,952	52,206
Animal feed	34,992	41,413	27,488	21,911	26,870	41,118
Miscellaneous food preparations	200,182	188,047	214,739	276,326	388,332	499,400
Total	1,519,041	1,621,735	1,707,328	2,066,064	2,581,038	3,903,926

Source: Extracted from Kingdom of Tonga, *Statistical Abstract 1975*, Table 66, pp.59-60.

Table 2.37

Value of sales of six selected Nuku'alofa stores over one week ($)[a]

Food (types)[b]	Large store 1	Medium store 2	Small store 3	Small store 4	Small store 5	Very small store 6
Flour and flour preparations						
bread	110.00	82.00	24.00	20.00	10.00	8.00
other	40.00	22.00	5.00	8.00	7.00	-
Other cereals	4.00	5.00	-	-	-	-
Meats						
beef brisket	672.00	21.00	10.00	-	-	-
mutton flap	173.00	16.00	20.00	-	-	-
corned beef, tinned	41.00	10.00	3.00	14.00	13.00	-
other	-	11.00	-	0.70	9.00	-
Beverages	13.00	18.00	3.00	1.00	0.35	0.32
Dairy products	61.00	30.00	14.00	3.00	2.00	1.00
Spreads	2.00	5.00	0.52	-	-	-
Condiments	45.00	29.00	9.00	5.00	6.00	0.21
Cooking aids	17.00	2.00	5.00	4.00	0.70	-
Fruits and vegetables	1.00	0.35	-	0.20	-	-
Sweets	34.00	14.00	0.74	4.00	5.00	3.00
Drinks	14.00	17.00	2.00	3.00	3.00	3.00
Other	9.00	2.00	-	0.58	0.20	-
Total (food)	1,236.00	284.35	96.26	63.48	56.25	15.53
Non-food						
tobacco products	320.00	103.00	4.00	12.00	42.00	0.60
other	336.00	101.00	21.00	19.00	14.00	15.00
Total (non-food)	656.00	204.00	25.00	31.00	56.00	15.60
Total (all sales)	1,892.00	488.35	121.26	94.48	112.25	31.13

Notes: a Values less than $1 are given in cents; other values are rounded to the nearest dollar.

b Types included in each category are the same as given in Table 2.28.

Source: Study of selected stores, October 1976.

Table 2.38

Value of credit sales and owner's consumption of store stock for six selected Nuku'alofa stores over one week[a]
($)

Sales	Large store 1	Medium store 2	Small store 3	Small store 4	Small store 5	Very small store 6
Total sales	1,892.00	488.35	121.26	94.95	112.25	31.13
Credit sales[b]	39.00	6.00	98.00	-	19.00	-
Stock for home use[c]	n.a.	23.00	36.00	12.00	9.00	9.00
Stock given away[d]	-	-	11.12	-	8.93	3.81

Notes: a Figures are for the same stores and the same week as those in Table 2.37.

b Included in 'Total sales'.

c Not included in 'Total sales'.

d Not included in 'Total sales'.

Source: Study of selected stores, October 1976.

Table 2.39

Value of sales of six selected rural Tongatapu stores over one week ($)[a]

Food (type)[b]	Medium store 7	Small store 8	Small store 9	Small store 10	Small store 11	Very small store 12
Flour and flour preparations						
bread	25.00	25.00	11.00	44.00	16.00	2.00
other	15.00	9.00	11.00	5.00	11.00	5.00
Other cereals	4.00	-	-	-	0.92	-
Meats						
beef brisket	81.00	53.00	45.00	11.00	22.00	-
mutton flap	5.00	19.00	12.00	-	-	-
corned beef, tinned	16.00	3.00	9.00	14.00	5.00	6.00
other	2.00	8.00	4.00	4.00	4.00	-
Beverages	3.00	0.45	1.00	2.00	0.34	-
Dairy products	13.00	6.00	8.00	0.42	5.00	-
Spreads	1.00	-	0.44	-	0.40	-
Condiments	13.00	15.00	10.00	5.00	10.00	3.00
Cooking aids	6.00	7.00	3.00	-	3.00	-
Fruit and vegetables	-	-	-	-	-	-
Sweets	7.00	3.00	3.00	4.00	4.00	0.13
Drinks	7.00	4.00	3.00	7.00	2.00	0.60
Other	1.00	0.90	0.16	-	-	-
Total (food)	199.00	153.35	120.60	96.42	83.66	16.73
Non-food						
tobacco products	67.00	57.00	43.00	55.00	26.00	21.00
other	129.00	46.00	34.00	27.00	39.00	7.00
Total (non-food)	196.00	103.00	77.00	82.00	65.00	28.00
Total (all sales)	395.00	256.35	197.60	178.42	148.66	44.73

Notes: a Values less than $1 are given in cents; other values are rounded to the nearest dollar.

b Types included in each category are as given in Table 2.28.

Source: Study of selected stores, October 1976.

Table 2.40

Value of credit sales and owner's consumption of store stock for six selected rural Tongatapu stores over one week[a]
($)

Sales	Medium store 7	Small store 8	Small store 9	Small store 10	Small store 11	Very small store 12
Total sales	395.00	256.35	197.60	178.42	148.66	44.73
Credit sales[b]	83.19	91.27	105.00	25.19	24.54	5.38
Stock for home use[c]	1.73	10.92	13.23	15.74	26.03	13.93
Stock given away[d]	60.75	-	-	43.52	2.37	-

Notes: a Figures are for the same stores and the same week as those in Table 2.39.

b Included in 'Total sales'.

c Not included in 'Total sales'.

d Not included in 'Total sales'.

Source: Study of selected stores, October 1976.

Chapter 3

Selling and buying food at Talamahu Market

Every day from Monday to Saturday, the Talamahu Market of Nuku'alofa is open for business. From Monday to Thursday the market hours are eight in the morning to six in the evening. On Friday Talamahu stays open till ten at night to allow vendors to bring in their produce for the main trading day of the week, Saturday. Then the market opens at four in the morning to give the vendors time to set themselves up inside before trading begins, because after half-past seven nothing for sale may enter the market. Latecomers pile their produce on the northern side outside the walled area. But they are hardly disadvantaged, except when it rains.

Talamahu, which stands in the middle of Nuku'alofa, is the hub of Tongatapu where most forms of public transportation converge. At either end of the market are the bus terminals and the taxi stands located nearby. Indeed, the trading centre of Nuku'alofa is shifting to the area surrounding the market. Morris Hedstrom Limited, one of the two large trading firms, has been located there long before the market came into existence. Burns Philp Company Limited, the other large trading firm, is, at the time of writing, constructing its main premises opposite Talamahu not far from its overseas rival. A number of small trade stores, a restaurant catering for the indigenous palate and no one else's and the only currently-operating barber shop in Nuku'alofa, have taken advantage of the central position of the market for their business. Only a few steps away are the Nuku'alofa police station, the courthouse, the house of parliament, the post office, the Bank of Tonga, the main government offices and Vuna Wharf, the arrival and departure point for inter-island vessels. The Talamahu Market, in short, is the most centrally located institution in the kingdom. It is also the institution which, more than any other, distributes money, which would otherwise concentrate in the capital, to rural dwellers from one end of the island to the other. Although it functions as an economic leveller, the market benefits Tongatapu mainly and to some extent 'Eua. The other island groups hardly

benefit from it at all. Neiafu on Vava'u has a weekly market but with a population of just over 3000, it is not nearly as urbanized as Nuku'alofa with its 20,000 inhabitants.

The vendors

Personal characteristics. Unlike Fiji, Tonga has a largely homogeneous population. The fact that the *Statistical Abstract 1975* shows nothing on the ethnic composition of the Tongan population is indicative of the numerical insignificance of the non-indigenous elements. This homogeneity is reflected in the fact that 98 per cent of the 482 vendors interviewed in the two surveys consisted of Tongans (Table 3.1). Virtually all the rest are part-Tongan. I use the terms 'part-Tongan' and 'part-European' deliberately to differentiate between two classes of people of mixed blood. 'Part-European' refers to those people with part-foreign ancestry whose life-styles are the same as those of Europeans. These people use English as their first language. There are only a few of them in Tonga because most have emigrated. Those who remain are generally wealthy businessmen and their families. 'Part-Tongan' refers to people with part-foreign ancestry who orient themselves socially to the indigenous community and use Tongan as their first language. A number of them are businessmen who are not as wealthy as the part-Europeans. Many more of them are in government serving as middle- and high-ranking officials. They regard themselves, and are regarded by others, as native Tongans. People refer to their foreign ancestry mainly when discussing their achievements, saying, 'They are doing well because of their *palangi* blood'.

The age and sex composition of vendors may be seen in Table 3.2. In general, the male vendors are younger and older than their female counterparts. For instance, nearly four-fifths of vendors under twenty years of age are males. Similarly, four-fifths of vendors aged sixty and older are males. Part of the explanation for this is that since women are highly respected in Tongan society, the elderly females remain at home away from the rough-and-tumble life of the market place. Furthermore, as old women are physically weaker than their younger counterparts, they stay at home to mind the children while younger women accompany their men to market. At the other end of the scale, young girls are conspicuous by their virtual absence as vendors. Tongan society is highly protective of its nubile girls, partly in order to keep them virginally respectable thereby enhancing

their chances for securing a good marriage. Thus the market place is not for them. If they were to work there they would not only lower themselves socially, but would probably be teased or accosted by rapacious young males, or exposed to all manner of evil and temptation, risking a fall from the grace not only of God but also and especially of the more desirable eligible men.

More than half of all vendors go to market only once a week or irregularly (Table 3.3). Two-thirds of those who attend the market once a week, mostly on Saturday, are males. Saturday is the heaviest trading day of the week in terms of volume of produce and number of people involved. As we shall see later, the types of produce sold most on Saturdays are heavy baskets of root-crops such as yam, taro, tapioca and sweet potato, or heavy bunches of banana and plantain. It is a man's job to shift these cumbersome things around. Female vendors generally look after lighter things such as fruit and green vegetables.

The domination by males of market vending also fits in with the traditional division of labour between the sexes. Unlike Melanesia, all horticultural work is the responsibility of men. Women do no labour that demands strenuous physical effort. Their domain is the home - cooking the family meals, raising children, keeping the house clean and the lawn swept (men cut the grass). Heavy work involved in cooking in earth ovens is done by men. Tongans desire their women to be plumpish and soft, comfortable cushions for the men to rest upon after a hard day's work in the fields or in offices. Such desires account for the country's population explosion. Until recently, when carving was introduced, women, who weave mats and baskets and make tapa, did all the handicraft work. Here again is another contrast with Melanesia where art and craft are virtually the exclusive domain of the male. It is fitting therefore that Tongan men, the producers of foods, should dominate the sale of their produce in the market. It is also fitting that the sale of traditional handicraft in the market is dominated by the women who make them.

One-fourth of the permanent vendors, those selling six days a week, are under forty years of age (Table 3.2). In other words most of the permanent vendors are middle aged and old people who have done their share of hard work and are now enjoying their hard-earned rest sitting in the market all day while their young do the work at home or in the bush

sending produce for them to sell. Some say that old people are consigned to the market to get them out of the way. Many of these permanent vendors admit that the market is an exciting place to work in - there they meet daily, people from all over Tonga, and not infrequently, visitors from other lands.

As for education, the majority of vendors had a junior secondary school (college) education (Table 3.4). Only one had received higher educational training. What effect the junior secondary school education has had on the lives of these vendors is impossible to estimate. But it may be said that Tongan subsistence gardeners are probably the most educated of their kind in the whole Pacific. There are so few avenues for employment available in the kingdom that most school-leavers have to fall back on their land for their livelihood. In fact many of them earn a much better income from gardening than their 'fortunate' counterparts who have secured jobs in the lower ranks of the civil service, etcetera.

Only 8 per cent of the total number of vendors surveyed lived in Nuku'alofa (Table 3.5). This indicates that town residents depend less on their lands for cash income than rural dwellers, which is to be expected in an urban situation. Three-quarters of the total number of Nuku'alofa vendors were present at the market during the second survey only, in August. The reason for this is that August falls in the main harvesting season for yam, the most valued staple root-crop in Tonga. Many Nuku'alofa people have formed themselves into yam growing clubs known as *kautaha toutu'u*. Much of the yam harvested goes to market since it fetches a better price than other crops. A basket of yam sells for more than $6 whereas the other root-crops earn on average about $1.20 a basket. These Nuku'alofa people who work their land, plant their gardens for their own consumption whilst earning their cash income from wage employment. They plant yam gardens partly for home consumption and partly for market sale since yam fetches such a good price. A small but growing number of Nuku'alofa men have gone into strictly commercial farming, some growing green vegetables for local sale, others growing root-crops for export to the large Polynesian immigrant population in New Zealand.

Most of the vendors come from rural areas of Tongatapu and a few from the other islands. The proportions of vendors living in the different regions of Tongatapu indicate the

relative sizes of these regions. Eastern District is the biggest in area and provides the largest number of vendors. It is followed proportionately by Central District and Western District which is also the hardest pressed for land. With the improvement in sea transportation in recent years, a growing number of vendors are coming from the nearby island of 'Eua to sell their produce at the market. Most of them come irregularly, especially early in the year, mainly to earn money to pay for their children's school fees and other school expenses. The vendors from Ha'apai and Vava'u were short-term visitors selling produce on behalf of their host relatives.

Nearly three-quarters of all the vendors questioned gave Tongatapu as their place of origin (Table 3.6). A man's place of origin is crucial in that it is there that he acquires his piece of agricultural land, the so-called tax allotment, of 8.25 acres. It is extremely difficult, though not impossible (provided, nowadays, that one has money for illegal transactions) for people from other islands to acquire tax allotments in Tongatapu. That is why their number as vendors is low although there are thousands of them living in Tongatapu. Their proportion as vendors is, however, not insignificant for they comprise one-fifth of the total number of vendors interviewed. Most of them own land in Tongatapu as they or their ancestors moved to the main island when land was still easily available. It is the more recent comers who find it difficult to acquire a tax allotment or even a town or village allotment for their homes.

Proximity to the market seems to be important with regard to the frequency of selling (Table 3.7). Thus 52 per cent of Nuku'alofa vendors are permanent sellers; about a third of the vendors from the Central District, the region immediately surrounding Nuku'alofa, are permanent, with much lower proportions for the more distant Eastern and Western Districts. On the other hand, the more remote the vendor's place of residence the less frequent is his market attendance; most people from the remoter areas attend the market either once or twice a week, or irregularly.

Although permanent vendors comprise nearly a quarter of the total number of sellers in the market, some of them are there to sell produce sent by their families or friends. Many also buy items from village producers for resale, but because of the relative newness of the market, a general

sense of shame associated with selling what one has bought and an unfounded fear that the practice is illegal, many permanent vendors answered quite untruthfully that everything they sold came from their own gardens. Tonga has not yet reached the stage where people accept the middleman as a normal feature of marketing life. A few producers from rural villages go to market with their goods to sell to permanent vendors. These villagers feel impatient having to spend time hawking their own produce, especially during the slack period in the middle of the week. They would rather receive money quickly and return home. One permanent vendor told me that he often acts as a money lender to villagers needing cash urgently for their children's school fees or for their annual church collection. They go to him and borrow the required amount which will be paid back in produce. Such debtors invariably give produce valued far in excess of the loan. They do this not because of an agreement but because they feel gratitude and know that they will be able to borrow money from the same vendor again.

Only a small proportion of vendors interviewed in the first survey of the market indicated that market sales were the only source of cash income for his or her household (Table 3.8). Like most trade store owners, vendors look to other sources to supplement their generally meagre income. More than 70 per cent of the vendors indicated the production and sale of copra (including the sale of mature coconuts to the Copra Board) and bananas as the other source of their household cash income (Table 3.9). This is to be expected of rural people in Tongatapu. But the results of the second survey give a very different picture (Table 3.10). About 54 per cent of the vendors interviewed in this survey said that they had no source of cash income other than marketing; and only 14 per cent indicated the production of copra and bananas as the other source of cash income for their families. Why such a difference in response between the two surveys?

The first probable explanation is error on the part of the surveyors. But it should be remembered that the same questionnaire was used in both surveys and that the same men (plus a few others in the second) were employed in both surveys. Moreover, the difference is so great that it cannot be accounted for by error alone. Second, the vendors interviewed might not have been forthcoming with their answers and might have grunted 'no' in response. Some time after the survey a permanent vendor who is a convivial acquaintance of

mine said that most vendors hated being interviewed so they gave any old answer. There may be some truth in that assertion but it seems unlikely that half the interviewees would do this. Tongatapu is a very small island and people do know a lot of other people from one end of the island to another. The interviewers, virtually all middle-aged men with a long experience in the deviousness of their fellow Tongans, would have spotted blatant fabrications. In fact, they told me with great relish of some of the crooked ways of market vendors. I would not deny error and misinformation but what I am certain of is that these could not alone account for the vast difference in the responses to the question under consideration. A third probability is that the responses were largely truthful. If this is the case, then why in August 1976 did more than half the vendors interviewed say that they had no source of cash income other than market sales? First, at that period Tonga was in a most parlous position financially. For the rural people the price of copra had been very low for many months. Several people both in Tongatapu and in Vava'u told me in the middle of 1976 that they had ceased making copra or selling coconuts to the Copra Board. It was not worth the effort, they said. If this attitude was widely held at the time, then it was likely that many market vendors interviewed in August had indeed stopped making copra or selling coconuts, the only ways many rural-dwelling Tongans have of earning their cash income. This would account in part for the big difference between the March and August surveys.

Other sources of household cash income, apart from agriculture, differed only slightly but proportionately between the two surveys. The proportion was higher in August (30 per cent) than in March (27 per cent). This may partly be accounted for by the increase in the number of Nuku'alofa people selling in the market during that season.

As in many other parts of the Pacific, most vendors (95 per cent) at the market not only sell for themselves but also sell things which they themselves or members of their households have produced (Tables 3.11 and 3.12). Most producers prefer to sell their own produce in order to get better prices, and as we have seen above, they either go themselves to the market or send their close relatives. The convenience of commuting to Nuku'alofa and the relatively short distances of travel favour this preference. No vendor has to stay in Nuku'alofa, except those from 'Eua, who,

depending on the rate of sale and the perishability of the produce, stay with their relatives until they have sold everything.

Half of those few who sell foodstuffs not produced by themselves or by their households buy all the goods for resale. They are the so-called permanent vendors. Some permanent vendors sell things which their families send them; but in addition they also buy things for resale. Then there are those who sell things not produced by themselves, but not bought either. They are people selling their own produce and that of their friends and relatives who, for a variety of reasons, cannot stay in the market to sell their own goods. In cases of this sort payment as such is not expected but, as is the custom in Tonga, a gift is appropriate. The practice of selling things for others, in addition to one's own, is not widespread, as can be seen readily from Table 3.13. There are stories of people selling for others and taking off with the proceeds or giving the owners less money than expected, explaining that that was all that was obtained from the sales.

In the two market surveys, we did not deal with vendors who sold only non-foods. The market is predominantly a produce one with only a relatively few vendors offering non-foods only. Non-foods offered for sale consisted mainly of handicrafts and perfumed coconut oil for the Tongan hair and body. Non-food items offered in conjunction with food were duly recorded (Table 3.14). Only a tenth of the vendors offer non-foods as well as foods. Three-quarters of these vendors say that the sale of non-foods, as a proportion of their total sales, is minimal. Only four out of fifty say that the sale of non-foods comprises more than 50 per cent of their total sales.

Prepared foods - mainly a native pudding (*faikakai*), boiled eggs and milk, and when in season, corn and a fruit-nut called *ifi* (*inocarpus edulis*) - like non-foods, feature insignificantly as far as the involvement of vendors is concerned (Table 3.14). Only 2 per cent of the vendors surveyed on both occasions offer prepared food either exclusively or in conjunction with unprepared food. Two-thirds of the vendors offering prepared food say that the sale of prepared food comprises only a quarter or less of their total sale. We did not deal with peanut vendors because they do not confine themselves to the market - they

hawk their peanuts wherever there are large crowds. The other vendors are stationary.

Talamahu Market then is a place which specializes mainly in unprepared foods: starch staples and green vegetables. Almost 90 per cent of the vendors surveyed offered unprepared food alone or, in a few instances, in conjunction with prepared food and non-food.

Vendors dispose of their unsold produce in several ways. The method most used is price reduction (Table 3.15). It is resorted to mostly on Fridays and Saturdays by short-term vendors - those who sell only once or twice a week (Table 3.16). There are two ways of reducing prices. One is the actual reduction of prices while the volume of items offered remains constant. This is applied to bulky and heavy items like baskets or bundles of tapioca and taro. The other is to increase the amount of produce while keeping the price constant. This is applied to small and cheap items like piles of tomatoes. Some vendors reduce their prices because they wish to get rid of their produce and go home, especially the irregular and one- and two-day vendors. Other vendors resort to price reduction because of the condition of their produce, most of which is highly perishable. A basket of tapioca, for example, starts to go bad after three days or so; its price therefore has to be reduced after a short while to encourage sale. A basket of yams, on the other hand, may stay at the same price for weeks provided that the skin of the yams remains unbroken. Prices often go down because of oversupply. Prices also fall because of a combination of perishability and oversupply. Thus, during the August survey, the volume of tomatoes offered for the first three days of the week was not very great and most sellers sold two pound piles at 20c apiece. Then on the fourth day a man entered the market with about 2000 pounds of very ripe tomatoes which he could not ship to New Zealand. He arranged them in roughly 2½ pound piles priced at 20c. Immediately, all the other tomato sellers followed suit. Then he increased the piles to three pounds and again every other tomato vendor followed, muttering oaths under his breath. It was a most delightful time for the tomato eaters of Nuku'alofa.

The other main way of disposing of unsold produce is to leave it in the market for the following day. Very few give anything away or even take it home.

Production

Produce for the market comes from three types of garden: subsistence gardens with planned surplus, subsistence gardens with unplanned surplus, and gardens made solely for sale in the market or for export. (I shall refer to the third type as 'market garden'.) Vendors selling produce from gardens with planned surplus and from market gardens comprise nearly three-quarters of the total number interviewed (Table 3.17). Given the growing urbanization of Nuku'alofa, the proportion of purely subsistence gardeners in Tongatapu will fall as time goes on, for the whole island is the hinterland of the town. The important point to be noted here is that with the increasing monetization of the Tongan economy, the purely subsistence farmers in Tongatapu are becoming relics from a bygone era.

Just over 70 per cent (83 out of 117) of the vendors whose produce came from market gardens were interviewed in the August survey. This disproportion between March and August may be explained in the following manner. Most produce sold in the market during the early part of every year consists of native staples, native and citrus fruits, and native green vegetables. Most of the staples come from subsistence gardens, with planned or unplanned surplus. The fruits come from perennial trees found in the villages or scattered in the bush. There are no orchards in Tonga. In responding to the question on the (garden) source of his avocado pears, one vendor said that the pears came from a tree that neither he, his father nor his grandfather planted. 'God planted that tree', he said, 'and I'm selling what God gave freely.' The latter part of every year is the season for introduced vegetables, the most favoured of which, for Tongan buyers, are tomatoes, spring onion, cabbages and watermelon. These vegetables are usually planted in special gardens aimed at the market and for export to New Zealand. That is why so many vendors in August said that their produce came from non-subsistence gardens (Table 3.18).

Concommitant with the movement toward increased commercial and semi-commercial farming is the increased use of machinery in gardening by ordinary villagers. The machinery used is mainly tractor-drawn ploughing equipment and bulldozers. These tractors, owned by certain well-off individuals and by the government, are hired out to farmers on request. In 1975, twenty-two tractors were registered in Tongatapu; the number

exactly doubled in 1976. This number excludes tractors owned by the government.[1] Thirty per cent of the vendors interviewed said they used machinery to cultivate their gardens (Table 3.19). Virtually half of those who said they use machinery are those who have market gardens; a further 32 per cent are those who planned a surplus, and the rest (19 per cent) comprise those with unplanned surpluses. In short, the more commercial a garden is, the more likely the gardener is to resort to machinery. A likely implication for Tongatapu is that the more farming is mechanized, the greater will be the need for fertilisers, which will lead to higher prices for food at the market. Again, the opening of overseas markets for Tongan staples and other vegetables, fetching good returns, may lead not only to higher internal prices, but to scarcity and low quality. This trend has already started with kava. In 1976 a bundle of kava sold for prices ranging from 15¢ to 30¢ depending on quality. In 1977 the same bundle of kava sells at not less than 50¢ and the quality is very poor. The reason is that kava producers are exporting their produce for good prices. They reserve the better parts of the kava plant for export while consigning stems and rotten roots to the Talamahu Market, and even these are scarce. The same holds true for bananas.

Transportation

Vendors go to market mainly on buses, covered passenger trucks and open trucks (Table 3.20). A few, especially from Nuku'alofa and the Central District, have their own motor transport. Even fewer, from Nuku'alofa and the Central District, use taxis; it costs too much to hire small vehicles such as mini-moke taxis to go long distances, especially for small-scale gardeners who constitute the vast majority of vendors. Vendors from 'Eua come by boat. On Fridays especially, buses and trucks are kept very busy transporting vendors and their produce to the market in preparation for the Saturday morning trade. Vendors who use the market for more than one day a week may go to the market in open trucks with their produce. They leave their unsold produce in the market and commute daily on buses and passenger trucks until they have sold everything. These people do not have to stay in Nuku'alofa since they all live well within a radius of twenty miles from town and since transportation is readily available.

[1] Report of the Minister for Police for 1975; Traffic Branch Annual Report, 1976.

Public transportation in Tonga has improved since 1970 (Table 3.21). The number of buses and heavy trucks has at least doubled and that of light trucks has multiplied almost five-fold. These light, open trucks congregate with mini-moke taxis just outside the market - with drivers giving the appearance of aloofness although in reality they are praying fervently for someone to hire them. The number of taxis - cars, mini-mokes and motorised tricycles - has been declining steadily since 1970. This is due in part to deterioration, to the difficulty of obtaining spare parts and to lack of adequate garage facilities. Mini-mokes particularly have suffered since spare parts are very difficult to procure. Those which still operate depend very much on cannibalism - they are maintained with spare parts taken from other mini-mokes. Taxis, however, are used mainly in the town - the vast majority of rural dwellers commute on buses and passenger trucks which charge relatively cheap fares.

Table 3.22 shows the cost of transportation according to the various regions from which vendors travel. As expected, the cost rises with the distance from the capital. Although parts of Eastern District are further from Nuku'alofa than the furthest parts of Western District, the main reason for the Eastern District vendors paying more for transportation than other parts of Tongatapu is the sheer volume of produce that comes from that region.

The produce

The Tongan palate and the Tongan stomach demand two types of food: starchy staples and meats, preferably ringed with fat. Starchy foods become heavenly, to the inhabitants that is, when boiled in thick coconut cream. But starch without meat (*kiki*) is like bread without butter. The only exception is the highly-valued yam which some folk consider to be its own *kiki*. Green vegetables are no substitute for meat; thus to give a respectable Tongan a plate of starchy food with only green vegetables is like giving someone who always takes three spoons of sugar with his drinks a cup of tea with a tiny tablet of artificial sweetener. In the recent past, when Tongans were less affluent in terms of meat, mutton flap not yet having invaded the country, most people led a largely vegetarian life eating meat only once or twice a week if they were fortunate. Today, especially in Nuku'alofa, children very often refuse to touch food if there is not meat to go with it. They cry and make a lot of fuss. A small

amount of fatty and bony mutton flap with plenty of water and a pinch of salt, curry and flour for thickening, does the trick and keeps the home in harmony. People get their meats from retail stores, as we have seen in the previous chapter, and their starch foods from the market, if they are urbanites. This explains why the Talamahu Market is predominantly a starch-foods market. About three-quarters of the total value of food taken weekly to the market comes from starch foods, including banana, plantain, sweet potato, taro, yam and tapioca (Table 3.23). Moreover, 83 per cent of all vendors deal in staple crops, most of them as their main items for sale (Table 3.24).

Tables 3.25 and 3.26 show the amount of food taken daily to the market by the 482 vendors interviewed during the surveys. These two tables may be compared with Tables 3.27 and 3.28, which show the market's own records of food brought in every day. The results of our March survey differ markedly from those of the market's record for the same period. The market's figures are larger than ours. On our second survey in August, I added more men to the survey team and the result of the week's count of produce is set out in Table 3.26. Figures from this survey are not very different from those obtained by the market officials themselves (Table 3.28).

Despite the differences mentioned above, the patterns that emerge from the counts are similar. Contrary to the belief that tapioca (*Manihot esculenta*) is quantitatively the largest crop in Tonga and the one most consumed, the four tables (3.25, 3.26, 3.27 amd 3.28) show that taro futuna and taro tea (*Xanthosoma* spp) are by far the most popular crop sent to the market. It is also the crop handled by the largest number of vendors. At least twice as many vendors sell this variety of taro as any other produce. Given half a chance, Tongans would eat yam (*Dioscorea alata*) all year round, but at $6 a basket on the average, it is expensive so is consumed mainly on Sundays and at feasts. Of the root crops, taro futuna lasts longest (at least two weeks above ground without rotting). Taro futuna is also very filling and more solid than tapioca and sweet potato; it settles heavily, like lead, in the stomach and the eater needs no food for hours afterward. For the buyers of Nuku'alofa, most of whom are not of the middle, bourgeois class, this counts a lot when they consider their food expenses. Besides, taro tastes better to Tongans than the other two staples. It is

true, however, that at one stage tapioca was the most widely used starch food because of the ease of its production - it grows on any soil (except waterlogged ones) and bears tubers prolifically. But tapioca was, and still is, considered a lazy man's food. And although most people grew and used tapioca, no one boasted about it and no one considered himself lazy although his neighbours might think otherwise. The shift from tapioca toward taro futuna started when machinery came into common use, allowing the cultivation of taro on a much larger scale than was hitherto possible. And, of course, the leaves could be sold for added income. People planted more of it than tapioca and Nuku'alofa benefited as a result. There is nothing like money to lure people away from a lazy man's fare to better things in life, although one can hardly call the taro futuna a better thing in life.

Next in the scheme of food preference is a plantain called *hopa* (*Musa paradisiaca*), but this crop cannot be mass-produced in a tiny country. It requires a much larger area than for root crops to produce *hopa* in respectable quantities. In default, sweet potato (*Ipomoea batatas*) ranks second to taro in terms of quantity taken to market. Though consumed a lot, sweet potato in general ranks only slightly above tapioca because most of the varieties are too watery or fibrous. At a rough estimate, four mouthfuls of sweet potato equal one mouthful of taro futuna. One variety of sweet potato, called *kumala vai* (watery kumala), can almost be drunk. Taro has to be thoroughly masticated and savoured or one gets choked in the process. The best variety of sweet potato, one pronounced delicious by local connoisseurs, is *tongamai* which is solid and which appears occasionally in the market and sells in no time. The reason for the relatively low production of *tongamai* is its susceptibility to leaf scabbing.

Banana (*Musa sapientum*) is an export crop consumed as a staple in much lower quantities than other staples. Often people peel a few green bananas to top up their pots of taro or sweet potato. The best quality banana is reserved for export, with the inferior quality banana (often the outright reject) being packed in large baskets for sale in the market. The relatively few bunches taken to market need ripening and are mainly for sale to Europeans. Permanent sellers buy bunches of bananas from Saturday-only vendors at about a dollar for a good quality bunch. They then divide the bunches into hands for ripening and sell them at rip-off prices

ranging from 20¢ to 60¢ a hand. No sensible Tongan buys them; they are mainly for the rich local Europeans and occasionally tourists, who can be heard to ooh! and aah! at how cheap they are.

Breadfruit (*Artocarpus altilis*) is a seasonal crop which matures in late summer so it does not appear in the August survey. If a person is lazy and has no garden but has two breadfruit trees outside his house, he can subsist on them for three to four months every year. He can even give a lot to his more industrious neighbours who happen to have no breadfruit trees outside their houses. Then he can conceivably live the rest of the year on his neighbours' hospitality in return for his three or four months' generosity. But such a thing does not happen in Tonga, despite a radio program in early 1976 in which the police warned all citizens that the breadfruit season gives no excuse for anyone to be lazy. People must work, said the police, and those who do not are liable to prosecution under a law relating to laziness and vagrancy.

Tapioca ranks so low in people's esteem that twice as much breadfruit was sold as the former: in our sample, our surveyors recorded 183 baskets of breadfruit sold as against sixty-four baskets of tapioca. The market's enumerators counted 623 baskets of breadfruit sent to market as against 243 for tapioca (Table 3.27). Breadfruit sold more despite the fact that a basket of it cost $1 whereas a basket of tapioca sold at 70¢ or 80¢. Breadfruit and tapioca are highly perishable commodities - they go bad within a matter of a few days. When tapioca goes bad it becomes inedible; but when the breadfruit goes off, as far as cooking staples are concerned, it becomes soft and when baked it turns sweet and may be consumed as a dessert. Taro tonga (*Colocasia esculenta*) has only recently been popularly planted in Tonga despite its ancient presence. Again, its recent popularity stems from its value as an export commodity; and because of its excellent taste it is becoming increasingly popular as a staple. Nevertheless, it has yet to take a strong hold over the Tongan palate as it has the Fijian and the Samoan palates. Giant taro (*Alocasia macrorrhiza*), which is usually planted together with yam, is an annual crop that matures in mid-summer and gives variety to the usual diet of the more popular staples. Some people are wary of it because, if harvested too late or if peeled thinly, it can give the eater a nasty bite in the mouth, spoiling an otherwise bland meal.

The four tables also show that the early part of the year is the season for fruit and the later part the season for green vegetables. The most available of fruits during the early part of the year and up until May and even June are oranges and *vi* (*Spondias dulcis*) which looks like a small pear and tastes like a most immature cooking apple (Tables 3.25 and 3.27). At the height of the season, five pound baskets of oranges or *vi* sell at 20¢ each. Ninety-one large baskets of oranges weighing about 50 pounds each were recorded during the week of the first survey. During the same week, the market's own produce enumerators counted 44,613 individual oranges, more than half of them from 'Eua, the largest regional supplier of citrus fruits for the Nuku'alofa market.

Husked green coconuts are sold throughout the year at 5¢ for a medium sized coconut and 10¢ for a large one. The latter contains sufficient juice to quench the thirst of two Tongans or four skinny Europeans. Tables 3.27 and 3.28 show that 18,407 dry coconuts were taken to the market during the two survey weeks. Dry or mature coconuts sell in 10¢ piles of four nuts or in small 20¢ baskets of eight nuts.

Unlike other parts of the Pacific, especially west Melanesia, which have several traditional leaf vegetables, Tonga has only two types: the *pele* or edible hibiscus (*Hibiscus manihot*) and the young leaf of taro (*lu*) with which the fabulous *lupulu* is made. (Some people eat the leaves of sweet potato and pumpkin, but they do not sell them at the market.) *Lu* appears mainly on Saturdays for the Sunday luncheon or feast. Other (introduced) vegetables are not very popular and sell mainly to Europeans. The exceptions are tomatoes (of the tomato-onion-mutton flap mixture) and cabbages. In a land of very fertile soils and sub-tropical climate, all kinds of green vegetables, including cauliflower and brussel sprouts, have been grown successfully; but the population has yet to be tempted by introduced vegetables. A normal Tongan eats carrots, for example, only when he lies helpless in hospital and has no choice but to eat what he has been given by the dietitian. Nevertheless, cucumber and lettuce have also become a common garnish for feasts, especially in Nuku'alofa.

The Tongan preference for the introduced vegetables - tomatoes and cabbage - may be seen in the quantities taken to market (Tables 3.26, 3.28). A good deal of the tomatoes are grown for the off-season market in New Zealand; some go

to Suva, at times via Auckland. In March 1976 only small amounts of tomatoes came onto the market. But what became available in the off-season was of exactly the same poor quality as those selling at the height of the green vegetable season in the Suva Market. When in season, Tongan tomatoes are big and beautiful. Since 1976 tomato growers have learnt a lesson or two, resulting in a fair availability of relatively good quality tomatoes in the Nuku'alofa market during the entire off-season period in 1977.

The four tables dealt with so far in this section show clearly that most of the produce goes to market on Fridays and Saturdays. Although Talamahu operates daily (except, of course, Sundays) it is still predominantly a weekend market. If Tongans do not usually buy weekly supplies of groceries, as we have seen in the previous chapter, they, or most of them who live in Nuku'alofa, do so with their supplies of staples. The reasons are obvious. First, there is only one market which stands, unlike trade stores, a fair distance from most people. One does not send children to the market with the frequency that one sends them to the neighbourhood stores. Second, most vendors go to market on Saturdays only, providing buyers with the best range of produce to choose from. Besides, prices are lower on Saturdays than on weekdays. Some town dwellers sometimes wait till Saturday afternoon before going to market. They figure that prices will drop even further when the time for vendors to return home approaches. Sometimes they are right and sometimes not, so arrive only to find hardly anything left worth buying. In recent months the market has been denuded of most staples except baskets of yam by midday on Saturdays. The preference for buying up weekly supplies of staples may also be seen as an explanation for the preference for taro futuna over tapioca which, as we have seen, deteriorates quickly.

As far as regional sources of the main staple foods are concerned, Eastern District has the edge over the others. This is not surprising since the district has the largest land area. That Western District supplies the largest volume of taro futuna and taro tonga is also not very surprising. Western District, as mentioned elsewhere, is a long and narrow piece of country which is also the hardest pressed for land. Of all the major staples, taro futuna and taro tonga are the most economic in terms of area needed for their cultivation. For example, when planted, yam mounds are spaced out at about 6' x 6', sweet potato mounds at 4' x 4', taro tonga at 3' x 3', and taro futuna at about 2' x 2' so that its leaf-umbrella

helps keep down the weed. Thus to get the maximum out of their available land, the growers in the Western District seem to have opted for the taro. Central District as a supplier seems to be behind Western District overall. One reason is that although this region looks big on the map, if the lands that belong to the people of Nuku'alofa are discounted, what is left for the rural dwellers of the district is reduced considerably. There are also large tracts of land occupied by the government experimental farm, two church school farms, two boarding schools and a royal estate. 'Eua sent just about as much yam to the market as Western District and more than Central District. Perhaps with further improvement in sea transportation, 'Eua will also become the main supplier of yam. It is roughly comparable in size with Eastern District, extremely fertile and the area least hard-pressed for land in the whole of Tonga.

Table 3.29 shows that most green vegetables, apart from tomatoes, come from Central District. Most of this comes not from individual village growers but from a large Mormon Church boarding school, Liahona. According to the Liahona vendor, the school planted the vegetables primarily for school consumption with the surplus despatched to the market. It is of interest that probably the biggest leaseholders in the country are three church colleges (one Mormon, one Seventh Day Adventist and one Methodist). They are also among the major agricultural producers in the kingdom. The SDA college, Beulah, runs Tonga's most successful dairy farm. The Methodist school, Tupou College, has the single largest coconut plantation, the biggest herd of beef cattle and the biggest vanilla stand on Tongatapu. It also has Tonga's only abattoir and a modern butcher's shop which stands in the middle of Nuku'alofa and is charmingly called 'The Students' Protein Market'. It goes without saying that the success of this boarding school in agriculture rests to a large extent on the use of 700 little boys as free labour, outside school hours that is. In the past, as today, the school was largely self-sufficient in terms of food. It is probably the most self-sufficient institution in a country that is increasingly dependent on imported foods. The whole of Tongatapu may have bread for breadfast; not Tupou College: there it is tapioca all the way, boring but home-grown.

Case studies

So far I have dealt in general with the main features of produce marketing in Nuku'alofa. In this section I

examine twelve vendors in terms of the features described above; but I also discuss what these vendors individually offered and what they earned. I take six vendors from each of the two surveys; three from each group are Saturday-only vendors and the other three are permanent sellers.

Vendors in March

Vendor One is a man in his twenties who comes from an Eastern District village, his place of origin and residence. His household obtains its cash income not only from marketing but also from a brother who teaches and another brother who works in New Zealand. Vendor One goes to market once a week and occupies a floor space for which he pays 20¢. He sells food which his own family produces. At the time of the survey, the produce came from subsistence gardens with a planned surplus for market sales. Machinery was not used in the cultivation of the gardens. Instead, Vendor One used one of the many 'working groups' known as *tou ngaue*. Members of these groups, consisting of fellow-villagers, work together in turn in each other's gardens. Working with a group of friends makes gardening less lonely and more enjoyable; it also encourages members to keep up with each other. Vendor One went to market in an open truck, paying $6 for the transportation of himself and his produce.

Vendor One's produce consisted of staple foods only, as seen on the list. He sold everything except ten baskets of yams, which he said he would ask a permanent vendor to leave on his stall. He did not say whether or not he would return the following day to sell them or leave them with the permanent vendor to sell for him.

Vendor One resorted to some price reductions. He had originally divided his hopa into two groups, selling one at 70¢ and the other at 60¢. He similarly divided his bananas, offering them at two different prices. He changed his mind as the time passed, charged lower-range prices for all and thereby got rid of everything. He went home with $84.40, more than the fortnightly salary of most Tongan wage employees.

Vendor Two is a 52-year-old man who lives in a Central District village which is his place of origin and birth. He goes to market once a week, occupies a 20¢ floor-space and sells his own family's produce. His family has no other source of income apart from gardening. Vendor Two paid $2

for the open truck transportation of his breadfruit and himself to the market.

Table 3.30

Vendor One: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
Yams - bskt	17	5.00, 6.00	85.00	7	5.00	35.00
Breadfruit - bskt	30	0.80	24.00	30	0.80	24.00
Hopa - bunch	25	0.60, 0.70	16.20	25	0.60	15.00
Taro futuna - bskt	12	0.70	8.40	12	0.70	8.40
Bananas - bunch	5	0.40, 0.50	2.20	5	0.40	2.00
Total			135.80			84.40

Table 3.31

Vendor Two: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
Breadfruit - bskt	64	1.00	64.00	64	1.00	64.00

Vendor Two said he planted his breadfruit trees specifically for sale at the market. He normally reduces his asking price if selling becomes difficult, but on that Saturday in March 1976 he encountered no difficulty, sold every basket at the original asking price and returned home happily.

Vendor Three is an aged man of more than three score years, whose family originates in the Ha'apai group where he was born, but who has lived in a Western District village for the past five years. He said that gardening, partly for subsistence and partly for sale at the market, is the only

source of cash income for his household. He sells once a week produce from gardens which he and his family have planted without the aid of machines, hired labour or work groups. Vendor Three does not have much money so, like many others in his financial position, his main reason for going to market at weekends is to earn enough money to buy meat, especially for the important Sunday luncheon. On the day of the interview, Vendor Three went to Nuku'alofa on a truck, paying 60¢ for the ride.

Vendor Three sold all but five baskets of dry coconuts, which he said he would keep in a room in the market. The room he referred to is a lock-up stall, one of more than forty built along the walls of the market and rented to a few large-scale producers and to village groups in turn.

Table 3.32

Vendor Three: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
Sweet potato - bskt	3	1.00	3.00	3	1.00	3.00
Pata - bunch	2	0.70,0.60	1.30	2	0.60,0.70	1.30
Coconuts, dry - bskt	16	0.20	3.20	11	0.20	2.20
Total	Total		7.50	Total		6.50

The fact that none of the three one-day vendors took green vegetables to the market is revealing. They all took staple foods. If we re-examine Tables 3.25 and 3.27 we see that, relative to other vending days, few green vegetables, except taro leaves and tomatoes, are sent to the market on Saturdays. As we have seen, Saturday is the day of the staples. Green vegetables and fruit sell in small units at low prices. One has to stay in the market for lengthy periods in order to earn a fair amount of money. Green vegetables and fruit are handled mainly by long-term vendors; the one-day-a-week vendors want big money quickly, and this can only be achieved by dealing in large items which fetch more than 70¢ per unit of sale.

Vendors One, Two and Three represent three types of Tongan today. Vendor One belongs to a growing number of young Tongans with junior or even senior secondary school education who cannot find wage employment in the country. Their plight is one of the major problems the kingdom faces. Many of them have left the country to work as labourers abroad and many are walking the streets of Nuku'alofa. But there is a growing awareness that a good living can be earned on the land; and if one is persistently industrious one can earn more cash income than most, if not all, wage earners. This awareness, helped by overseas markets created by Polynesian migrants, has attracted an increasing number of people, including young men, back to the land. In fact, one of King Taufa'ahau's often-announced plans is the facilitating of transportation of Tongan produce, apart from the traditional bananas and copra, to markets in New Zealand, New Caledonia and Hawai'i. The trend toward commercial production of traditional root-crops, as well as tomatoes, watermelons and capsicum, has been spearheaded to a large extent by well educated Tongans, occupying high positions in government and government-sponsored statutory bodies. These men have turned to commercial farming for an income better than their salaries. There are also a number of large-scale producers who are full-time farmers. Vendor One is one of those young men who are increasingly looking to their land for cash income; they produce not only for export but also for the growing produce market in Nuku'alofa.

Vendor Two is the type of Tongan who wants to preserve his traditional leisure and at the same time acquire money the easy way. Such people get or try to get what they want in various ways, including the crooked. Being a sagacious man, Vendor Two saw his opportunity for easy cash income in the growing urbanization of Nuku'alofa, and planted several breadfruit trees on his land. Once they grow, these trees need little attention, remaining fruitful for many decades. Today Vendor Two waits for the right season and when it arrives the breadfruit simply fall into his hands followed by money into his pockets. Vendor Two is indeed a wise man.

Vendor Three typifies the old Tonga, which still exists in parts of Tongatapu, and especially in the outer islands. The attitudes of these people belong to the very recent past before the real change toward the monetization of the Tongan economy had begun. As long as these people are able to meet their children's school fees, pay their annual head tax to

the government and tithes to their churches and buy a few necessities of life including meat for their Sunday meals, they need no more and demand even less. They grow sufficient produce for their own home consumption with surpluses, whether planned or unplanned, to send to the market. Theirs is a philosophy of life which is strong but is coming under increasing pressure in the current drive towards growth.

Vendors Four, Five and Six are permanent sellers in the market. Vendor Four is a woman in her forties whose place of origin, birth and residence is a Central District village. She is a paid vendor for a qualified agriculturalist who was at the time of the survey also the manager of a statutory body. The vendor and her employer are not related. The produce is sold in a lock-up stall which her employer has rented virtually permanently. Vendor Four goes to market in a private vehicle.

Vendor Four's is one of the very few stalls, not more than three, which sell produce by the pound. Vendor Four's employer is also a commercial farmer who uses the stall as an outlet for his produce. During the week of the survey, the produce sold consisted of imported onions and potatoes which earned the employer a relatively good income by Tongan standards. The employer is a renowned national figure, and a versatile man; the market is just one of his many involvements.

Vendor Five is a late middle-aged woman from Niuafo'ou (the most remote of the Tongan islands) who now lives in Nuku'alofa. She hires a table from which she sells food and non-food items. Her household earns its income from gardening and from the salaries of two of her children who work for the government. All the food she sells is produced by her family from subsistence gardens with planned surplus. She is normally taken to the market on a bicycle ridden by a young man in her household.

On the week of the survey Vendor Five offered, in terms of value, more non-food than food items although her actual earning from the latter far exceeded the former. Vendor Five's average daily sales were $1.75, which is low by any standard although comparable with lowest wage earners in Tonga.

Table 3.33

Vendor Four: produce and sales

Produce	Quantity offered	Price per unit ($)	Expected return ($)	Quantity sold	Price per unit ($)	Actual return ($)
Monday:						
potatoes	bags	0.20 per lb	n.a.	122 lbs	0.20	24.40
onions	bags	0.20 per lb	n.a.	19 lbs	0.20	3.80
Tuesday:						
potatoes	bags	0.20 per lb	n.a.	-	-	-
onions	bags	0.20 per lb	n.a.	10½lbs	0.20	2.10
Wednesday:						
potatoes	bags	0.20 per lb	n.a.	24 lbs	0.20	4.80
onions	bags	0.20 per lb	n.a.	6 lbs	0.20	1.20
yams	6 bskts	0.20 per lb	n.a.	-	-	-
Thursday:						
potatoes	bags	0.20 per lb.	n.a.	28 lbs	0.20	5.60
onions	bags	0.20 per lb	n.a.	15 lbs	0.20	3.00
yams	bskts	0.20 per lb	n.a.	-	-	-
Friday:						
potatoes	bags	0.20 per lb	n.a.	83 lbs	0.20	16.60
onions	bags	0.20 per lb	n.a.	37 lbs	0.20	7.40
yams	bskts	0.20 per lb	n.a.	-	-	-
kava	bag	0.20 bndl	n.a.	6bndls	0.20	1.20
cabbages	bskts	0.10 ea.	n.a.	20	0.10	2.00
Saturday:						
potatoes	bags	0.20 per lb	n.a.	66 lbs	0.20	13.20
onions	bags	0.20 per lb	n.a.	75 lbs	0.20	15.00
yams	bskts	0.20 per lb	n.a.	-	-	-
kava	bag	0.20 bndl	n.a.	-	-	-
				Total sold		100.00

Table 3.34

Vendor Five: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	Quantity sold	Price per unit ($)	Actual return ($)
Monday:						
bananas - bunch	3	1.00	3.00	2 hands	0.20	0.40
hopa - bunch	1	1.50	1.50	-	-	-
pawpaw - ea.	5	0.05	0.25	2	0.05	0.10
yams - bskt	1	7.00	7.00	-	-	-
kava - bundle	10	0.30	3.00	-	-	-
non-food:						
kava bowls	2	6.00, 7.00	13.00	-	-	-
coconut hair oil - bottle	12	(0.20, 0.30, 0.50	4.00	-	-	-
trad. stomach ache medicine - bottle	17	0.20	3.40	-	-	-
tobacco - lengths	10	0.20	2.00	-	-	-
Tuesday:						
Monday's unsold produce +				2 hands hopa	0.20	0.40
breadfruit - ea.	4	0.10, 0.15	0.50	10 bndls kava	0.25	2.50
Wednesday:						
Tuesday's unsold produce				4 btls hair oil	various	1.20
				5 btls medicine	0.20	1.00
Thursday:						
Wednesday's unsold produce +						
bananas - hand	4	0.20	0.80	1	0.20	0.20
pawpaw - ea.	4	0.05	0.20	4	0.05	0.20
				10 bndls kava	0.35	3.50
				4 btls hair oil	0.20	0.80
Friday:						
Thursday's unsold produce				3 hands hopa	0.20	0.60
				2 btls medicine	0.20	0.40
Saturday:						
Friday's unsold produce				nothing sold	-	-
	Total		38.65	Total		10.30
				Value food sold		6.90
				Value non-food sold		3.40

Table 3.35

Vendor Six: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	Quantity sold	Price per unit ($)	Actual return ($)
Monday:						
bananas - hand	7	various	1.65	2	0.20	0.40
coconuts, green - ea.	16	0.10,0.05	1.25	7	0.05	0.35
oranges - pile	1	0.10	0.10	-	-	-
lemons - pile	1	0.10	0.10	-	-	-
pele - bundle	7	0.10	0.70	7	0.10	0.70
Tuesday:						
mandarins - pile	9	0.10	0.90	2	0.10	0.20
coconuts, green - ea.	47	0.10	4.70	4	0.05	0.20
Wednesday:						
Tuesday's unsold produce	-	-	-	4 green coconuts	0.05	0.20
Thursday:						
Wednesday's unsold produce	-	-	-	nothing sold	-	-
Friday:						
Thursday's unsold produce + *ifi* - string[a]	20	0.20	4.00	20	0.20	4.00
Saturday:						
Friday's unsold produce + *ifi* - string	20	0.20	4.00	20	0.20	4.00
	Total		17.40	Total		10.05

Note: a The prepared *ifi* belonged to a relative on whose behalf Vendor Six did the selling.

Vendor Six is another woman in her forties whose place of origin and birth was a Western District village. She now lives with her husband in a gardening settlement in Central District. She sells produce which her family grows in subsistence gardens with planned surplus. It costs her 50¢ for transportation on a truck to the market. Apart from Friday and Saturday, Vendor Six's average earnings from the first four days of the week was 56¢ which was very, very low. When the daily rent of 30¢ for her stall and her daily bus fares of 20¢ were deducted, she was left with only 6¢ profit per day. On Friday and Saturday of the survey week, a relative of hers gave her some boiled *ifi* to sell. She returned the $8 she earned in those two days to the owner of the *ifi*.

Apart from Vendor Four's sales of potatoes, which was largely to European and a sprinkling of Tongan customers, the three instances of permanent sellers described in the previous paragraph show that very little staple food is sold during weekdays. I have discussed this in a previous section. Permanent vendors depend largely on the sale of fruit, vegetables, prepared food and/or non-food. Virtually all the bananas sold by the three permanent vendors during the week of the survey went not as staples but as fruit because they were either ripe or ripening. Tongans do not go in large numbers to the market during weekdays. Staples are for Saturdays and sold mainly by one-day vendors.

Vendors in August

The patterns of marketing described and analysed in the previous pages were confirmed by the second survey of the market conducted in August of the same year. Vendor A, a 50-year-old Eastern District man, is a once-a-week seller who earns all his cash income from making gardens and growing vegetables specifically for sale in the market. He hires a tractor to prepare the ground. He makes use of the members of his work group who plant his gardens and help with weeding. On the day of the survey, Vendor A hired a truck for $5 to transport his produce to Nuku'alofa. He said that when, at times, he has produce left unsold he asks a permanent vendor to sell it for him during the following week.

As seen on the list of Vendor A's produce and sales, he had to reduce his asking price by 20¢ in order to sell. Another vendor on the same day, a 29-year-old man from the

Table 3.36

Vendor A: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
taro futuna - bskt	120	1.20	144.00	80	1.00	80.00
taro tonga - bskt	30	1.20	36.00	30	1.00	30.00
tapioca - bskt	10	1.00	10.00	10	0.80	8.00
	Total		190.00	Total		118.00

same district as Vendor A, offered 200 baskets of sweet potato at $1.50 each. He reduced his price by 10¢ and sold all for a total of $280. This man, like Vendor A, hired tractors for his gardens and utilized the members of his work group. This man's aim was to save sufficient to build a concrete house. This is also the aim of most Tongans who go to New Zealand on guest work schemes. Many people have now discovered that they can build houses with money earned by working the land. But they have to have the land first - an increasingly difficult thing because of the rapid population growth.

Vendor B is a 22-year-old youth who has a brother living in New Zealand remitting money to the family. Otherwise Vendor B's household depends on the produce market for its cash income. One of Vendor B's main responsibilities is to earn sufficient cash to keep his younger brother at school; so his gardens are for both home consumption and sale. He uses machinery but employs no paid labour, not even a mutual assistance work group. On the day of the survey, he paid $2.40 for transportation to the market. He never has unsold produce, he said, because he always reduces his prices at 3.30pm to get rid of everything. Vendor B indeed reduced the price for some of his produce before he sold everything.

After transportation costs are met, Vendor B's take-home earning of $27.40 is a fair income, sufficient to keep the family comfortable for a week and to save a little for keeping the younger brother at school.

Table 3.37

Vendor B: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
taro futuna - bskt	14	1.20	16.80	10	1.20	12.00
giant taro - ea	15	1.00	15.00	4	1.00	4.00
giant taro - ea	15	1.00	15.00	9	1.00	9.00
				6	0.80	4.80
	Total		31.80	Total		29.80

Vendor C is like Vendor Three of the March survey except that he is a much younger man, in his thirties. But unlike Vendor Three, C's family has a further source of cash income from making copra. His produce (see Table 3.38) was sufficiently small so as to fit it in a passenger truck at the cost of 20¢ including his own (one-way) fare. The produce came from a purely subsistence garden; Vendor C, an irregular vendor, said that only if there is a surplus does he go to market.

Table 3.38

Vendor C: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
taro leaf - bundle	21	0.10	2.10	21	0.10	2.10
banana leaf - bundle	13	0.10	1.30	13	0.10	1.30
market baskets	9	0.10	0.90	9	0.10	0.90
	Total		4.30	Total		4.30

The bundles of taro leaf were the only food items that Vendor C offered and sold. The banana leaf bundles were for wrapping *lupulu* for baking in earth ovens. **Normally there**

are about six leaves in a bundle. The small coconut leaf baskets are sold as shopping bags. A lot of children make money by selling such baskets on the beach at Vuna Wharf where fishermen normally land and sell their catch. By the unclean look of some of these baskets, one suspects that children collect rejects for recycling to an unconcerned public. Vendor C's total earnings were sufficient to purchase two packets of cigarettes, a few pounds of mutton flap and a tin of corned beef for his family's Sunday luncheon. (On the other hand, and this is by no means infrequent, Vendor C could have brought in sufficient produce to earn money for a few bottles of beer before going home.

Vendors A, B and C are weekend sellers and as the vendors in the March survey, the food they take is largely staples. Vendors D, E and F are permanent sellers. Vendor D is a thirtyish Vava'u woman who has lived in the Central District for a year and a half. The head of Vendor D's household is a senior government official who, like many other prominent men, has taken to commercial farming for more cash income. The household head farms by using machinery and paid labour. He hires nine men for one day every month to help with the gardens. Vendor D commutes by bus to market where she varies her prices according to the condition of her highly perishable produce. Vendor D, like permanent vendors interviewed in the first survey, sells mainly vegetables and some non-foods. She also sells prepared food, the Tongan pudding (*faikakai*), which consists of mashed taro, breadfruit or tapioca, creamed with coconut caramel and wrapped in banana leaves. It is very sweet, very rich and fattening. Vendor D's return of $50.40 for the week is fair by Tongan standards. The head of her household earns an annual salary of not less than $3500.

Vendors E and F provide examples of permanent vendors who buy produce for resale (see Tables 3.40, 3.41). Vendor E buys all her produce and Vendor F only some. One reason for the difference between them is access to land in Tongatapu. The husband occupies himself with creating model canoes and carving images of angry Hawaian and Maori gods for sale to tourists, many of whom have lots of money and very little sense or taste. Vendor F and her husband are natives of Tongatapu and have access to land for gardening. Both lady vendors depend largely on ripening bananas and hopa which they sell at prices ranging from 20¢ to 80¢ for a hand. They buy their stock from Saturday-only vendors who are forced to

Table 3.39

Vendor D: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
Monday:						
pele - bundle	20	0.10	2.00	20	0.10	2.00
beans - pile	20	0.20	4.00	-	-	-
pandanus leaves - bundle	2	0.50	1.00	-	-	-
table mats - set	1	3.00	3.00	-	-	-
baskets	2	1.00,2.00	3.00	1	1.50	1.50
Tuesday:						
Monday's unsold produce + beans - pile	20	0.20	8.00	35	0.20	7.50
Wednesday:						
Tuesday's unsold produce + beans - pile	35	0.20	8.00	40	0.20	8.00
Thursday:						
beans - pile	40	0.20	8.00	30	0.20	6.00
cabbages - ea.	50	0.10	5.00	-	-	-
Friday:						
Thursday's unsold produce + beans - bulk		n.a.	n.a.	42 piles	0.20	8.40
Saturday:						
beans - bulk		n.a.	12.00	9 piles	0.20	1.80
cabbages - ea.	100	various	15.00	100	various	11.20
Tongan pudding - wrap	20	0.20	4.00	20	0.20	4.00
	Total		73.00	Total		50.40
				Value food sold		48.90
				Value non-food sold		1.50

Table 3.40

Vendor E: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	price per unit ($)	Actual return ($)
Monday:						
bananas - bunch	24	(12.50)	n.a.	-	-	-
hopa - bunch	6	(8.40)	n.a.	-	-	-
bananas - hand	26	various	13.40	23	various	9.00
carved canoes	9	various	21.00	1	2.00	2.00
table mats - set	1	4.50	4.50	-	-	-
Tuesday:						
Monday's unsold produce		-	-	hands	various	8.40
Wednesday:						
Tuesday's unsold produce		-	-	hands	various	3.60
Thursday:						
Wednesday's unsold produce +						
hopa - bunch	2	2.60	-	hands	various	5.60
				bunch bananas	1.20	1.20
Friday:						
Thursday's unsold produce +						
hopa - bunch	4	2/1.40	2.80	-	-	-
		2/1.20	2.40	-	-	-
				hands	various	2.00
Saturday:						
Friday's unsold produce +						
pawpaw - bskt	1	0.60	-	hands + hopa	various	1.10
			Total			32.90
			Value food sold			30.90
			Value non-food sold			2.00

Note: Amounts and values in brackets are for commodities purchased from other people which are kept for ripening and resale.

Table 3.41

Vendor F: produce and sales

Produce (unit)	No. offered	Price per unit ($)	Expected return ($)	No. sold	Price per unit ($)	Actual return ($)
Monday:						
(bananas - bunch)	(10)	(8.50)	n.a.	-	-	-
bananas - bunch	3	1.10	3.30	-	-	-
bananas - hand	6	various	1.75	2	0.40	0.80
hopa - hand	1	0.60	0.60	1	0.50	0.50
Tuesday:						
Monday's unsold produce	-	-	-	2 hands bananas	0.30, 0.40	0.70
Wednesday:						
Tuesday's unsold produce	-	-	-	2 hands bananas	0.50, 0.20	0.70
+ pawpaw - ea.	3	0.10	0.30	-	-	-
Thursday:						
Wednesday's unsold produce						
+ tapioca - bskt	6	1.00	6.00	6	1.00	6.00
taro futuna - bskt	2	1.00	2.00	2	1.00	2.00
Friday:						
Thursday's unsold produce	-	-	-	2 hands bananas	0.50	1.00
				1 hand hopa	0.80	0.80
Saturday:						
Friday's unsold produce						
+ (bananas - bunch)	(12)	(8.00)	n.a.			
bananas - bunch	10	1.25	12.50	3	0.80,1.50	2.30
				4 hands bananas	0.10,0.20	0.70
				1 hand hopa	0.60	0.60
lemons - pile	25	0.10	2.50	4	0.10	0.40
tomatoes - pile	26	0.10	2.60	-	-	-
				Total		16.50

Note: Amounts and values in brackets are for commodities purchased from other people which are kept for ripening and resale.

reduce their prices in order to unload themselves before returning to their villages.

The foregoing analysis of the twelve vendors, their produce and sales, brings out clearly a number of points. First, the permanent vendors depend for their sales largely on fruit and vegetables, some of which they buy from other sellers, mainly at weekends. Second, the Saturday-only vendors depend for their quick and sizeable returns on staples and on very little else. Third, prepared food and non-food are the concern of permanent vendors. Fourth, weekend vendors earn much more than their permanent counter-parts because the Talamahu Market is predominantly a staple food market, and the greatest volume of trade is conducted on Saturdays. Finally, there is a slow, natural growth of middlemanship in the market, catering for the needs both of producers and vendors. As I have mentioned above, most non-producer vendors were too ashamed or frightened to discuss their role. But the market is still in its infancy, so in time, the role of the middleman will become stronger, as it has done in other parts of the world.

The buyers

Buyers form the other side of the Talamahu Market, 665 of whom were interviewed with the assistance of eight senior secondary school students, on two successive Saturday mornings during the later part of August 1976. If vending is done mainly by people over twenty years of age, buying on Saturdays is dominated by teenagers who constitute 44 per cent of the total number of buyers interviewed (Table 3.42). Together with the under thirties, the youth of Nuku'alofa comprise two-thirds of the Saturday buyers. This is readily seen by any casual observer. Boys outnumber girls only slightly, by 234 to 199. Here we have a striking contrast in attitude toward buying and selling in the market. As mentioned earlier, only very few teenage girls go to the market as vendors. Market vending, like itinerant peanut selling, is a lowly occupation shunned by female teenagers, one of whose main aims in life is to appear beautiful and respectable. I have also mentioned the moral component in the attitude towards vending. Such attitudes are held more strongly in rural areas than in the town whose inhabitants, like inhabitants of towns the world over, consider themselves more liberated and more worldly-wise than the 'bushies'. Besides, buying does not have the stigma that vending has, for the buyer has

money to spend, whereas the vendor is in the market to acquire cash.

So Nuku'alofa teenagers of both sexes willingly obey their parents and go to the market to get food, sometimes in the company of older women. A lot of other teenagers go to market simply to meet their peers. Thus, going to market is a social event for these youths who dress up gaily and chatter incessantly. If older people want things in a hurry, they should go themselves since teenagers don't hurry, they busy themselves talking, parading, or simply ogling each other. Needless to say this takes time so it could be hours before they return home. One of the nagging frustrations of Tongan parenthood is trying to hurry their dawdling children: when parents send their children on errands they almost invariably add, 'And hurry up!' The children, of course, don't. It is necessary therefore to send a second batch to remind the first to hurry. The second group go willingly, but also take their time. I believe that this explains in part why the market is filled with youngsters. Half of them are there to buy things, whilst the other half are supposedly telling them to hurry up. Like most other forms of haste, hurrying goes against the Tongan grain. (This may be why the country is developing at the pace of the fabled tortoise. Until recently, Tonga had a fabled tortoise, Tu'imalila, which Captain Cook gave as a gift. Tu'imalila died very slowly, taking about 150 years to do it. Today, its remains are prominently exhibited inside the display window of the International Dateline Hotel, an apt reminder to foreign vacationers and jet-setters that when in Tonga, they must, like our youthful market buyers, slow down. Time may indeed begin in the Friendly Islands, as the travel brochure proclaims, but it always ends somewhere else.)

Like the vendors, most buyers are Tongans (Table 3.43). However, despite their small number, Europeans (both resident and visiting) and other foreigners, as well as a sprinkling of the indigenous bourgeoisie, have exerted an influence in the market far greater than their numerical size warrants. First, the availability of green vegetables other than taro leaves, cabbages and tomatoes is largely for their benefit. Second, their presence is to a large extent responsible for the continued existence of permanent vendors in the market. Sellers of fruits, vegetables, banana hands and handicrafts owe their existence mainly to foreigners. The fact that

permanent vendors, in general, earn less than Saturday sellers is a reflection of the numerical strength of their foreign customers.

As expected, most buyers live in Nuku'alofa (Table 3.44). But the fact that slightly more than 10 per cent are rural dwellers is significant in that it reflects the changing nature of the Tongan economy and of the rural-urban distinction. In the recent past it was bad enough that Nuku'alofa people bought staple foods; but that the rural people would do so was unthinkable. Even today, those who told me that country people were buying food in the market, said so with amusement and in rather scandalized tones. But the fact remains that an increasing number of country folk are full-time wage employees who cannot grow all the food they need. More importantly, many fathers are now working in New Zealand, with no one to make gardens for their families. These men remit money to their families in rural villages who then go to Nuku'alofa to buy food at the market. They cannot always depend on the generosity of their relatives. Again, men returning from temporary migrant work schemes in New Zealand take time to establish new gardens, and while waiting for their crops to mature, they purchase food from the Nuku'alofa market. With the growing number of landless people, the proportion of rural dwellers who depend on the market is bound to increase with time. It is almost certain that in the not too distant future there will be produce markets in the rural areas of Tongatapu.

Table 3.45 shows that most people go to market using their own transport. Some have cars and motor cycles, but most go by bicycle. Tongatapu is a small, flat island most suitable for the two-wheeled pedal machine. Buses convey the second largest group of buyers. Those who walk are mainly people living very close to the market. Table 3.45 does not, however, show how people get back home with their big baskets of taro, tapioca, sweet potato and yam. For the conveyance of these things there are available just outside the market many mini-mokes and motorized tricycles which charge 50¢ from the market to just about anywhere in Nuku'alofa.

Like vendors, most buyers (64 per cent) go to market only once a week (Table 3.46). If the twice-weekly goers are added to this, the proportion goes up to 80 per cent. Slightly more than half the buyers said that they buy all their food (meaning the traditional staples) from the market (Table 3.47).

Nuku'alofa is not yet a completely urbanized town; at least 40 per cent of the buyers said that they grow some of their own food requirements in the bush. The proportion of town dwellers who grow all their food is not known to me; they did not go to market. The real natives of Nuku'alofa have lands which together cover a big part of the rural Central District.

The largest group of buyers (36 per cent) spent between $5-$10 in the market (Table 3.48). This group includes people who come from large households and so have to buy several baskets of staples to feed their families for a whole week, and those who buy yams for ceremonial occasions and special meals. Given the fact that a basket of staples sells on the average at $1 or more (except tapioca which goes for 70¢ and 80¢), most buyers in the $5-$10 category would purchase at least two baskets of staples for their weekly supplies. The following list shows the average weight of baskets and bunches or bundles of different staple produce. This average was calculated from the combined weight of ten units of each produce.

Table 3.49

Produce by weight

Item	Weight (lbs)
Staples:	
yam - bskt	54.8
tapioca - bskt	46.4
sweet potatoes - bskt	35.1
taro futuna - bskt	34.4
giant taro - ea.	9.0
bananas - hand	3.2
Other:	
watermelons - ea.	20.1
cabbages - ea.	3.6
pawpaw - ea.	2.0
Chinese cabbages - ea	1.9
tomatoes - pile	1.7
capsicum - pile	1.4
taro leaf - bundle	1.0
beans - pile	0.5

It may be noted that although with rare exceptions vendors do not sell things by weight, experience and a tacit agreement between buyers and vendors has resulted in sale units of each type of produce being sold at the same price whilst being amazingly similar in size and weight. But size alone does not determine price; favoured varieties and quality in terms of state of maturation and condition of preservation are very important factors too. Finally, in support of my contention in previous sections, Table 3.48 shows indirectly that Tongans do not spend much on green vegetables; they go to market to buy staples. Those few people (6 per cent) who spent less than 50¢ spent their money on green vegetables and fruit, or on prepared food like the Tongan pudding. They could not have bought any staples.

As stated before, taro futuna (including taro tea) is the most popular staple food item for vendors to take to the market. It is also the most popular bought: with 55 per cent of the buyers, each purchasing almost two baskets thereof (Table 3.50). Next, in terms of most purchased items, is tapioca with 27 per cent of the buyers and sweet potato at 25 per cent. Of the green vegetables, the native taro leaf came first with 45 per cent of the buyers. Taro leaves are bought mainly on Saturdays for the Sunday luncheon. Second to taro leaf are tomatoes and cabbages. Most other vegetables are bought by sprinklings of buyers. In terms of money spent on each food type, taro futuna ranks first, followed by yam, sweet potato and then tapioca. Although only about 10 per cent of the buyers bought yam, as compared with 27 per cent for tapioca, each buyer spent almost $7 for a basket of yam. From the point of view of prices, one basket of yam equals seven of tapioca. Although in terms of being bought, taro leaf came second only to taro futuna, only about $100 was spent on it - by 296 buyers. A bundle of taro leaves costs 10¢.[2] Before one buys a bundle, one must make sure that the leaves are young; old taro leaves make ghastly *lupulu* for they give eaters a most unpleasant itch in the mouth, causing them extreme discomfort. This is most noticeable during polynesian-style feasts. Thus, if a feast-giver wants a sufficient amount left over for himself and his family, he

[2] See Thaman 1976:143 for a rank listing of foods according to the number of days per year on which a given product is eaten. It is significant in Thaman's tabulation that when taro futuna and taro tea are combined they rank top on the list.

makes *lupulu* with old taro leaves and places them on top of the pile of food. His guests will be most disconcerted and his roast pork, barbecued chickens and baked fish will remain largely intact at the end of the feast.

Finally, Tables 3.51 and 3.52 show the differences in the buying patterns of different ethnic groups. Tongans spend 80 per cent of the total amount spent in the market on staples. At the other end of the scale, Europeans spent only 42 per cent. On the other hand, Tongans spend only 10 per cent of their total market expenditure on green vegetables, whereas Europeans spend almost as much on vegetables as on staples. The 10 per cent spent by Tongans on green vegetables does not give an accurate indication of the daily consumption pattern - the greens bought are consumed mainly on Sundays. On other days the diet consists mainly of staples and meat. It is also probable that Europeans spend proportionately more on vegetables than appears in the tables. The impression one gets is that they do much of their green vegetable buying on weekdays. Some send their Tongan domestic servants to the market to do the buying. These servants buy mainly vegetables and fruit, so they would have been classified by our surveyors in the category of Tongan buyers, thereby inflating the percentage of vegetables bought by Tongans whilst deflating the results for Europeans. It is well known, especially to vendors, that Europeans, like Bugs Bunny, love to eat carrots and other such things which good Tongans generally avoid.

The discussion in this section confirms statements made in the previous ones about food preferences of people in Tonga. Buyers and sellers understand each other's likes and dislikes, thereby tailoring the trade at Talamahu Market to suit each other's needs. Nuku'alofa residents may complain about the high prices they pay for food not only in trade stores but also in the market. They are not, however, completely helpless for they could keep their purses closed and thus drive the prices down. This they can do with locally produced food but not with imports. It is a point worth considering in view of the oft announced official statements to the effect that inflation is a foreign import beyond the control and influence of Tonga.

Table 3.1

Ethnicity of vendors

Ethnicity	Number of vendors	% of vendors
Tongan	469	98.1
Others	9	1.9
Total	478[a]	100.0

Note: a Information not available for 4 cases.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.2

Age and sex of vendors

Age	Male	Female	Total	%
< 20	15	4	19	4.0
20-29	37	29	66	13.8
30-39	50	62	112	23.5
40-49	65	60	125	26.2
50-59	66	38	104	21.8
> 60	41	10	51	10.7
Total	274	203	477[a]	
%	57.4	42.5		100.0

Note: a Information not available for 5 cases.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.3

Sex and frequency of selling

Frequency (days per week)	Male	Female	Total	%
1	129	68	197	41.5
2-3	39	51	90	19.0
4-5	13	3	16	3.4
6	52	60	112	23.6
Irregular	38	21	59	12.4
Total	271	203	474[a]	
%	57.2	42.8		100.0

Note: a Information not available for 8 cases.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.4

Educational level attained by vendors

Level	No. of vendors	% of vendors
primary schooling	197	42.4
college schooling	267	57.4
higher education	1	0.2
Total	465[a]	100.0

Note: a Information unavailable for 17 cases.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.5

Vendor's place of residence

Place	No. of vendors	% of vendors
Tongatapu		
Nuku'alofa	39	8.4
Central District[a]	122	26.2
Eastern District	167	35.9
Western District	108	23.2
'Eua	15	3.2
Ha'apai	3	0.6
Vava'u	11	2.4
Total	465[b]	100.0

Notes: a Excluding Nuku'alofa.
b Information unavailable for 17 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.6

Vendor's place of origin[a]

Place	No. of vendors	% of vendors
Tongatapu		
Nuku'alofa	34	7.2
Central District[b]	93	19.7
Eastern District	127	26.9
Western District	97	20.6
'Eua	11	2.3
Ha'apai	49	10.4
Vava'u	41	8.7
Niuatoputapu	8	1.7
Niuafo'ou	10	2.1
'Atata	2	0.4
Total	472[c]	100.0

Notes: a i.e. place from which father's family originates.
b Excluding Nuku'alofa.
c Information unavailable for 10 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.7

Vendor's place of residence and frequency of selling

	Frequency (days per week)						
	1	2-3	4-5	6	irregular	Total	%
Tongatapu							
Nuku'alofa	6	5	4	20	3	38	8.6
Central District[a]	36	24	4	36	17	117	26.6
Eastern District	88	28	1	33	13	163	37.1
Western District	54	29	3	16	6	108	24.5
'Eua	2	1	-	-	11	14	3.2
Total	186	87	12	105	50	440[b]	
%	42.3	19.8	2.7	23.9	11.4		100.0

Notes: a Excluding Nuku'alofa.
b Information unavailable for selling frequency for 11 vendors from these areas.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.8

Proportion of total income derived from market sales

Proportion of income	Number of vendors	% of vendors
very little	66	30.3
about a quarter	48	22.0
about a half	48	22.0
about three-quarters	20	9.2
all	36	16.5
Total	218[a]	100.0

Note: a Information unavailable for 9 other cases.

Source: First survey of Talamahu Market, March 1976.

Table 3.9

Other sources of household cash income, in addition to market sales: March 1976

Income sources	No. of vendors	% of vendors
Agriculture[a]	161	70.9
Agriculture + other[b]	5	2.2
Overseas remittances	8	3.5
Overseas remittances + other[c]	5	2.2
Self-employment[d]	28	12.3
Self-employment + other[e]	1	0.4
White-collar wage employment[f]	12	5.3
Blue-collar wage employment[g]	7	3.0
Total	227	100.0

Notes: a Includes production of copra and bananas for export.
b 'Other' includes transportation, handicraft and skilled labour.
c 'Other' includes transportation, clerical, teaching, photography, ownership of trade stores and skilled labour.
d Includes handicraft, transportation, fishing, and subletting market stalls.
e 'Other' includes handicraft, teaching and clerical.
f Includes clerical and professional.
g Includes skilled, semi-skilled and unskilled labour.

Source: First survey of Talamahu Market, March 1976.

Table 3.10

Other sources of household cash income, in addition to market sales: August 1976

Income source	No. of vendors	% of vendors
Agriculture[a]	35	13.7
Agriculture + other[b]	7	2.8
Overseas remittances	6	2.4
Overseas remittances + other[c]	2	0.8
Self-employment[d]	26	9.4
White-collar wage employment[e]	24	9.6
Blue-collar wage employment[f]	18	7.6
No other source of cash income	137	53.7
Total	255[g]	100.0

Notes: a Includes production of copra, bananas and vanilla for export.
b 'Other' includes transportation, handicraft and skilled labour.
c 'Other' includes transportation, clerical, teaching, photography, ownership of trade store and skilled labour.
d Includes handicraft, fishing, transportation and subletting market stalls.
e Includes clerical and the professions.
f Includes skilled, semi-skilled and unskilled labour.
g Information unavailable for 30 other cases.

Source: Second survey of Talamahu Market, August 1976.

Table 3.11

Number of vendors selling for themselves

	No. of vendors	% of vendors
Vendors selling for themselves	429	94.9
Vendors selling for others[a]	23	5.1
	452[b]	100.0

Notes: a 18 of the 23 vendors selling for others were paid for their work.
b Information unavailable for 30 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.12

Production of food for sale: by vendor's household or by other producers

Food producer	No. of vendors	% of vendors
Vendor's household	418	94.1
Other producers	19	4.3
Some by vendor's household and some by other producers	7	1.6
Total	444[a]	100.0

Note: a Information unavailable for 38 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.13

Offered foods not produced by vendor's household: bought or not bought for re-sale

	No. of vendors	% of vendors
All produce bought from other producers for re-sale	12	48.0
Some of the food produced by others but not bought by vendors	6	24.0
Some produced by vendor's household and some bought	7	28.0
	25[a]	100.0

Note: a Information unavailable for 1 vendor.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.14

Number of vendors selling types of product each day of the week

Type of product	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total	%
Unprepared food only	66	58	41	41	91	115	412	77.3
Prepared and unprepared food	4	1	-	1	-	-	6	1.3
Non-food and prepared food	2	-	-	-	-	-	2	0.4
Non-food and unprepared food	35	1	2	2	-	8	48	10.2
Prepared food only	1	2	-	-	-	1	4	0.8
Total	108	62	43	44	91	124	472[a]	
%	22.9	13.1	9.1	9.3	19.3	26.3		100.0

Note: a Information unavailable for 10 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.15

Method of disposal of unsold produce for each vending day

Method of disposal	Number of vendors							
	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total	%
Reduce price	24	22	16	17	52	91	222	48.7
Take home for next day	4	2	-	1	1	2	10	2.2
Take home for family consumption	1	2	1	2	5	7	18	4.0
Give away	3	4	-	3	1	3	14	3.1
Leave in market for next day	52	23	20	18	17	12	142	31.1
Other[a]	18	9	6	2	10	5	50	11.0
Total	102	62	43	43	86	120	456[b]	
%	22.4	13.6	9.4	9.4	18.8	26.3		100.0

Notes: a 'Other' includes combinations of methods of disposal given in the table.

b Information unavailable for 26 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.16

Method of disposal of unsold produce and frequency of vending

Method of disposal	Frequency of vending (days per week)					
	1-3	4-5	6	irregular	total	%
Reduce price	179	4	22	16	221	48.8
Take home for next day	3	1	5	1	10	2.2
Take home for family consumption	14	-	1	3	18	4.0
Give away	8	1	2	3	14	3.1
Leave in market for next day	48	6	61	24	139	30.7
Other[a]	25	2	14	10	51	11.3
Total	277	14	105	57	453[b]	
%	61.1	3.1	23.2	12.6		100.0

Notes: a 'Other' includes combination of methods of disposal given in the table.

b Information unavailable for 29 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.17

Type of garden supplying produce for market

Type of garden	No. of vendors	% of vendors
Subsistence garden with planned surplus	192	44.8
Subsistence garden with unplanned surplus	120	27.9
Garden made solely for market sale	117	27.3
Total	429	100.0

Note: Information unavailable for 53 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.18

Proportion of produce grown on vendor's own tax allotment

Proportion	No. of vendors	% of vendors
None	19	4.5
Quarter	127	29.8
Half	82	19.2
Three-quarters	92	21.6
All	106	24.9
Total	426[a]	100.0

Note: a Information unavailable for 56 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.19

Use of machinery in food production

Machines used	No. of vendors	% of vendors
yes	123	30.2
no	284	69.8
Total	407[a]	100.0

Note: a Information unavailable for 75 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.20

Place of residence and mode of transportation to and from market

Mode of transportation	Number of vendors					Total	% of vendors
	Nuku'alofa	Central District[a]	Eastern District	Western District	'Eua		
bus and passenger truck	13	64	114	73	-	264	65.8
open truck	8	39	23	20	-	90	22.4
taxi	1	1	-	-	-	2	0.5
own motor transport	8	5	5	3	-	21	5.2
boat	-	-	-	-	12	12	3.0
other	6	2	-	3	1	12	3.0
Total	36	111	142	99	13	401[b]	
%	9.0	27.7	35.4	24.7	3.2		100.0

Notes: a Excluding Nuku'alofa.

b Information unavailable for 81 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.21

Number of vehicle registrations, Tonga

Type of vehicle	1970	1972	1974	1975
taxis (cars and mini-mokes)	525	193	190	185
motor tricycles (taxis)	74	51	39	29
buses	52	52	73	120
trucks (over 3 tons)	75	145	176	191
trucks (under 3 tons)	50	196	259	290
private cars	93	355	421	258
motor cycles	609	307	248	288

Source: Kingdom of Tonga, *Statistical Abstract 1975*, p.96; Annual Report of the Minister of Police for the year 1975.

Table 3.22

Place of residence and cost of transportation to market

Cost of transportation	Number of vendors					Total	% of vendors
	Nuku'alofa	Central District[a]	Eastern District	Western District	'Eua		
0-20¢	10	17	11	7	-	45	12.6
21-40¢	1	17	18	15	-	51	14.3
41-60¢	1	14	17	14	-	46	12.9
61-80¢	-	4	8	12	-	24	6.7
81¢-$1	1	7	15	10	1	34	9.6
$1.01-$2	1	17	19	13	1	51	14.3
$2.01-$3	4	15	15	10	2	46	12.9
$3.01-$4	2	9	9	9	-	29	8.1
$4.01-$5	-	2	6	1	3	12	3.4
$5.01-$6	-	-	3	-	1	4	1.1
$6.01-$7	-	-	2	-	-	2	0.6
$7.01-$8	-	-	4	-	1	5	1.4
$9-$10	-	-	4	-	1	5	1.4
$10.01+	-	-	1	-	1	2	0.6
Total	20	102	132	91	11	356[b]	100.0

Notes: a Excluding Nuku'alofa.
b Information unavailable for 126 vendors.

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.23

Total value of unprepared foods offered for sale ($)

Food (category)	March survey	%	August survey	%
native staples	3,739.30	77.7	10,531.80	72.0
native fruit	275.00	5.7	241.00	1.7
introduced fruit	500.60	10.4	1,575.40	10.8
native vegetables	109.00	2.3	115.00	0.8
introduced vegetables	78.70	1.6	1,853.50	12.5
other	113.00	2.4	320.00	2.2
Total	4,815.60	100.0	14,636.70	100.0

Source: First and second surveys of Talamahu Market, March and August 1976.

Table 3.24

Number of vendors offering types of produce during one week in August 1976

Produce (type and sale unit)	Vendors	Produce (type and sale unit)	Vendors
Unprepared foods			
Staples			
bananas - bunch	26	yams - bskt	48
bananas - bskt	17	sweet yams - bskt	4
bananas - hand	24	giant taro - ea	34
hopa - bunch	13	taro, tea and futuna - bskt	128
hopa - hand	3	taro, tea and futuna - bag	1
pata - bunch	1	taro tonga - bskt	6
pata - bskt	1	taro tonga - bundle	24
potatoes local - lb	2	tapioca - bskt	47
sweet potatoes - bskt	23	Total	402
Native fruit			
coconuts, green - ea	56	pawpaws - ea	25
coconuts, dry - ea	2	pawpaws - bskt	11
coconuts, dry - pile	8	Total	132
coconuts, dry - bskt	30		
Introduced fruit			
lemons - pile	7	watermelons - ea	19
pineapples - ea	1	soursop - ea	1
		Total	28
Native vegetables			
pele - bundle	12	taro leaves - bundle	45
		Total	57
Introduced vegetables			
beans - lb	4	lettuce, head - ea	17
beans - pile	22	lettuce, head - pile	3
beans - bulk	4	lettuce - bulk	1
cabbages - ea	34	lettuce, leafy - ea	2
cabbages - pile	4	onions, imported - lb	2
cabbages - lb	1	onions, imported - bag	3
cabbages - bskt	1	pumpkins - ea	6
Chinese cabbages - ea	5	silverbeets - ea	1
capsicums - pile	13	silverbeets - bundle	1
capsicums - bskt	1	spring onions - bundle	2
carrots - pile	14	spring onions - bulk	2
carrots - lb	6	tomatoes - pile	31
carrots - bskt	4	tomatoes - lb	4
corn - pile	1	tomatoes - bskt	21
cucumbers - ea	6	turnips - lb	3
cucumbers - lb	10	Total	237
eggplants - ea	4		
eggplants - lb	3		
eggplants - pile	1		

Table 3.24 (continued)

Produce (type and sale unit)	Vendors	Produce (type and sale unit)	Vendors
Meat and egg			
eggs - ea	3	octopus, dried - ea	2
fish, salted - ea	3	Total	10
Kava - bundle	2		
Prepared food			
Tongan pudding	2	milk, boiled - bottle, glass	3
eggs, boiled - ea	2	Total	7

Source: Second survey of Talamahu Market, August 1976 (255 vendors).

Table 3.25

Volume and value of unprepared foods brought to market each day of the week 8-13 March 1976

Produce (type and sale unit)	Number of sale units, by day						Total volume	Total value ($)[a]
	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.		
Native staples								
bananas - bunch	36	6	11	1	40	27	121	85
bananas - bskt	1	-	-	2	4	2	9	6
bananas - hand	62	27	-	4	-	17	110	25
breadfruit - ea	-	2	-	-	-	-	2	0.30
breadfruit - bskt	15	46	33	10	40	119	263	248
hopa - bunch	7	58	34	80	32	93	304	301
hopa - hand	5	3	23	-	-	-	31	12
pata - bunch	1	38	8	11	6	4	68	77
pata - bskt	-	201	4	17	8	26	256	205
sweet potatoes - bskt	-	8	8	3	293	266	578	741
yams - bskt	15	12	35	82	52	66	262	1,154
sweet yams - bskt	-	-	-	-	27	-	27	35
giant taro - ea	-	-	-	-	-	22	22	15
taro tea and futuna - bskt	2	20	40	53	201	123	439	555
taro tea and futuna - bag	-	-	2	-	-	-	2	8
taro tonga - bskt	-	3	8	9	15	11	46	69
taro tonga - bundle	3	14	15	12	31	21	96	84
tapioca - bskt	9	28	21	27	21	73	179	134
Native fruit								
coconuts, green - ea	240	183	266	276	51	5	1,021	61
coconuts, green - bulk	-	1	1	-	2	3	7	11
coconuts, dry - ea	20	-	40	-	-	2	62	3
coconuts, dry - pile	10	21	20	11	-	49	111	16
coconuts, dry - bskt	1	13	12	32	21	146	225	45
guavas - pile	24	2	3	1	-	-	30	3
guavas - bskt	3	-	-	1	-	-	4	5
pawpaws - ea	28	43	4	4	-	7	86	9
pawpaws - bskt	2	-	1	-	2	10	15	3
sugarcane - ea	-	9	-	60	65	100	234	25
sugarcane - bundle	-	-	-	20	19	-	39	50
tava - pile	3	-	-	-	-	-	3	1
vi - pile	55	39	11	8	-	-	113	11
vi - bskt	1	4	3	5	2	-	15	32
Introduced fruit								
granadillas - ea	-	-	10	-	-	-	10	1
lemons - pile	13	16	-	-	-	-	29	3
lemons - bskt	-	6	-	-	-	-	6	0.60
mandarins - pile	61	53	28	-	10	-	152	15
mandarins - bulk	-	-	1	4	1	4	10	13

Table 3.25 (continued)

Produce (type and sale unit)	Number of sale units, by day						Total volume	Total value ($)
	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.		
oranges - pile	60	147	20	56	15	30	328	31
oranges - bskt	15	23	6	33	4	10	91	188
pineapples - ea	66	43	-	-	-	12	121	27
pineapples - bskt	-	-	5	-	-	-	5	21
watermelons - ea	-	231	522	150	-	-	903	200
kola - pile	-	10	-	-	-	-	10	1
Native vegetables								
pele - bundle	71	84	31	175	129	28	518	53
taro leaves - bundle	35	61	21	36	125	287	565	56
Introduced vegetables								
avocados - ea	37	60	56	-	-	-	153	14
avocados - pile	9	-	-	-	-	-	9	0.90
avocados - bskt	-	-	1	1	-	-	2	0.60
beans - pile	4	12	-	-	-	-	16	2
beans - bundle	-	-	-	-	2	1	3	3
cabbages - bskt	-	-	-	-	1	-	1	n.a.
corn - bulk	-	-	-	13	10	-	23	28
cucumbers - ea	-	5	-	-	-	6	11	1
onions - bulk	-	2	20	-	5	-	27	n.a.
pumpkins - ea	-	5	-	-	-	-	5	0.50
tomatoes - pile	-	30	-	-	-	-	30	6
tomatoes - lb	-	3	-	-	-	-	3	0.60
tomatoes - bulk	-	-	1	1	2	1	5	14
turnips - lb	-	-	20	-	5	-	25	n.a.
turnips - pile	-	-	-	-	1	--	1	n.a.
Other								
ginger - bulk	-	-	-	-	-	3	3	2
kava - bundle	130	10	160	111	-	-	411	111

Note: a Values less than $1 are given in cents; the rest are rounded to the nearest dollar.

Source: First survey of Talamahu Market, March 1976 (227 vendors).

Table 3.26

Volume and value of unprepared foods brought to market each day of the week 16-21 August 1976

Produce (type and sale unit)	Number of sale units, by day						Total volume	Total value ($)[a]
	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.		
Native staples								
bananas - bunch	73	17	-	-	9	145	244	176
bananas - bskt	42	30	1	2	21	64	160	122
bananas - hand	165	12	38	28	14	18	275	76
hopa - bunch	9	-	6	15	18	2	50	54
hopa - hand	1	8	-	-	7	-	16	6
pata - bunch	-	-	-	-	4	-	4	3
pata - bskt	-	-	-	-	-	1	1	0.80
potatoes, local - lb	-	-	360	-	-	-	360	72
sweet potatoes - bskt	-	77	24	65	446	304	916	1,392
yams - bskt	77	29	42	64	145	71	428	2,785
sweet yams - bskt	-	-	-	-	7	19	26	30
taro, giant - ea	63	46	24	126	130	161	550	528
taro tea and futuna - bskt	78	146	219	130	846	1238	2,657	4,055
taro tea and futuna - bag	-	-	8	-	-	-	8	40
taro tonga - bskt	27	4	13	-	77	34	155	192
taro tonga - bundle	25	3	-	44	79	107	258	268
tapioca - bskt	34	76	110	112	111	373	816	732
Native fruit								
coconuts, green - ea	225	299	206	222	263	527	1,742	140
coconuts, dry - ea	20	-	-	30	-	-	50	1
coconuts, dry - pile	11	7	8	-	-	14	40	8
pawpaws - ea	86	43	11	24	16	5	185	17
pawpaws - bskt	-	8	-	1	9	21	39	11
Introduced fruit								
lemons - pile	21	10	-	-	-	25	56	6
pineapples - ea	-	2	-	-	-	-	2	0.80
watermelons - ea	835	756	980	723	285	632	4,211	1,568
soursop - ea	-	-	-	2	-	-	2	0.60
Native vegetables								
pele - bundle	20	29	6	-	45	72	172	17
taro leaves - bundle	60	69	106	14	145	598	992	98
Introduced vegetables								
beans - lb	-	10	80	-	20	-	110	22
beans - pile	64	71	44	92	42	197	510	99
beans - bulk	1	1	-	-	-	2	4	14
cabbages - ea	950	1394	1226	948	1478	160	6,156	409
cabbages - pile	-	8	7	12	50	-	77	4
cabbages - lb	-	-	-	-	20	-	20	4

Table 3.26 (continued)

Produce (type and sale unit)	Number of sale units, by day						Total volume	Total value ($)[a]
	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.		
cabbages - bskt	-	12	-	-	-	-	12	n.a.
Chinese cabbages - ea	-	60	-	50	65	80	255	37
capsicums - pile	33	63	60	46	15	25	242	48
capsicums - bskt	-	-	-	-	1	-	1	3
carrots - pile	10	32	31	65	13	121	272	54
carrots - lb	-	-	-	72	188	20	280	56
carrots - bskt	2	-	-	1	1	-	4	11
corn - pile	-	-	-	-	32	-	32	3
cucumbers - ea	30	80	-	10	-	10	130	15
cucumbers - pile	11	-	-	-	67	227	305	44
cucumbers - lb	35	-	100	-	-	-	135	27
eggplants - ea	-	16	-	-	7	10	33	5
eggplants - pile	4	-	-	-	-	-	4	1
lettuce, head - ea	231	101	6	20	140	132	630	45
lettuce, head - pile	-	32	4	-	11	-	47	5
lettuce, head - lb	-	-	-	50	-	-	50	10
lettuce - bulk	-	2	-	-	2	2	6	8
lettuce, leafy - ea	17	-	35	-	-	-	52	3
lettuce, leafy - lb	-	-	-	-	30	-	30	6
onions, imported - lb	84	-	-	-	-	-	84	17
onions, imported - bag	-	-	6	4	-	3	13	n.a.
pumpkins - ea	28	5	11	-	-	-	44	9
silverbeets - ea	-	-	-	-	-	12	12	1
silverbeets - bundle	-	-	-	5	-	-	5	0.50
spring onions - bundle	-	125	168	-	-	-	293	29
spring onions - bulk	-	-	-	-	7	3	10	80
tomatoes - pile	262	46	112	118	215	164	917	176
tomatoes - lb	60	70	288	-	-	-	418	84
tomatoes - bskt	10	35	80	15	72	31	243	509
turnips - lb	10	-	70	-	70	-	150	15
Other								
eggs - doz.	-	-	-	50	50	50	150	144
fish, salted - ea	10	13	-	-	-	-	23	11
octopus, dried - ea	86	20	16	14	150	-	286	133
kava - bundle	100	-	-	-	-	10	110	32

Note: a Values less than $1 are given in cents; the rest are rounded to the nearest dollar.

Source: Second survey of Talamahu Market, August 1976 (255 vendors).

Table 3.27

Volume of produce taken daily to Talamahu Market during the week 8-13 March 1976

Produce (type and unit)	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total
Native staples							
bananas - bunch, bskt	6	14	9	19	72	200	320
breadfruit - bskt	33	94	43	35	109	309	623
hopa - bunch	8	59	60	97	87	232	543
pata - bunch	9	3	13	6	22	144	197
sweet potatoes - bskt	6	1	7	2	541	177	734
yams - bskt	2	10	39	84	102	103	340
giant taro - ea	-	-	-	-	-	45	45
taro tea and futuna - bskt	11	31	101	120	305	614	1,182
taro tonga - bskt - bundle	2	13	9	33	96	88	241
tapioca - bskt	12	34	2	25	84	98	255
Native fruit							
coconuts, green - ea	753	879	600	747	383	899	4,261
coconuts, dry - ea	120	678	445	699	4,159	6,439	12,540
ifi - bskt	-	-	4	-	-	-	4
pawpaws - ea	29	23	23	19	167	253	514
sugarcane - ea	60	39	10	136	1,085	445	1,775
vi - ea	5,439	7,001	1,980	1,758	7,308	6,803	30,289
Introduced fruit							
lemons - ea	180	-	-	161	374	150	865
mandarins - ea	-	254	-	-	-	-	254
oranges - ea	3,305	10,480	4,100	13,651	6,821	6,256	44,613
pineapples - ea	-	31	-	16	38	-	85
watermelons - ea	-	250	350	580	-	-	1,180
Native vegetables							
pele - bundle	233	179	125	222	181	604	1,544
taro leaves - bundle	83	128	79	103	705	2,305	3,403
Introduced vegetables							
avocados - ea	56	100	30	-	-	80	266
beans - lb	5	40	-	49	45	2	141
cabbages - ea	-	-	-	-	40	-	40
corn - ea	-	50	-	6	10	-	66
tomatoes - lb	60	210	40	180	80	46	616
capsicums - lb	4	-	-	-	2	-	6
cucumbers - ea	-	20	-	-	-	90	110
lettuce - ea	-	-	-	-	5	40	45
onions, imported - bag	-	-	-	-	10	-	10
potatoes, imported - bag	-	-	-	-	10	-	10
parsley - bundle	-	-	-	-	1	-	1
Other							
eggs - doz.	-	60	54	30	46	34½	224½
kava - bundle	-	-	-	-	140	-	140

Source: Talamahu Market record of daily activity.

Table 3.28

Volume of produce taken daily to Talamahu Market during the week 16-21 August 1976

Produce (type and unit)	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Total
Native staples							
bananas - bunch, bskt	2	15	44	10	52	221	344
hopa - bunch	-	1	3	17	31	35	87
pata - bunch	-	-	1	-	3	6	10
sweet potatoes - bskt	-	45	-	259	346	63	713
yams - bskt	5	20	6	102	119	119	371
sweet yams - bskt	-	-	-	-	27	20	47
giant taro - ea	43	36	-	255	136	230	700
taro tea and futuna - bskt, bag	11	148	255	80	1,463	1,164	3,121
taro tonga - bskt, bndl	1	11	1	14	149	95	271
tapioca - bskt	13	82	115	86	318	288	902
Native fruit							
coconuts, green - ea	337	322	332	562	553	582	2,688
coconuts, dry - ea	15	388	270	480	1,256	3,458	5,867
pawpaws - ea	4	116	41	57	150	446	814
Introduced fruit							
pineapples - ea	-	-	-	-	24	-	24
watermelons - ea	250	150	280	530	644	-	1,854
Native vegetables							
pele - bundle	20	73	10	-	34	138	275
taro leaves - bundle	-	95	42	82	221	1,275	1,715
Introduced vegetables							
beans - lb	134	134	155	184	33	132	772
Chinese cabbages - ea	10	305	50	128	382	-	875
cabbages - ea	1,400	946	1,220	797	1,110	1,300	6,773
capsicums - lb	108	5	25	56	15	45	254
carrots - lb	42	42	-	86	185	37	392
cauliflowers - ea	5	8	-	-	10	-	23
corn - ea	-	-	400	-	300	-	700
cucumbers - ea	33	91	87	8	150	75	444
eggplants - ea	-	-	55	-	-	-	55
lettuce, head - ea	87	-	55	83	100	-	325
lettuce, leafy - ea	300	102	100	300	130	90	1,022
potatoes, imported - bag	6	6	-	-	-	-	12
silverbeets - lb	-	-	-	-	-	4	4
spring onions - lb	20	-	-	-	-	175	195
tomatoes - lb	280	3,370	5,535	2,350	3,495	3,250	18,280
turnips - lb	-	-	35	-	-	-	35
Other							
eggs - doz	-	-	-	30	200	100	330
kava - bundle	-	-	-	20	217	-	237

Source: Talamahu Market record of daily activity.

Table 3.29

Volume of produce offered during the week 16-21 August 1976, by its region of production

Produce offered (type and sale unit)	Tongatapu				'Eua	Ha'apai	Total
	Nuku'alofa	Central a District	Eastern District	Western District			
Native staples							
bananas - bunch	88	39	7	110	-	-	244
bananas - bskt	31	18	13	98	-	-	160
bananas - hand	115	65	95	-	-	-	275
hopa - bunch	25	2	8	6	9	-	50
hopa - hand	-	1	15	-	-	-	16
pata - bunch	-	-	4	-	-	-	4
pata - bskt	-	1	-	-	-	-	1
potatoes, local - lb	-	-	-	360	-	-	360
sweet potatoes - bskt	-	314	470	132	-	-	916
yams - bskt	65	28	158	90	87	-	428
sweet yams - bskt	21	-	2	3	-	-	26
giant taro - ea	88	31	287	88	56	-	550
taro tea and futuna - bskt	172	574	865	1,014	32	-	2,657
taro tea and futuna - bag	-	-	-	8	-	-	8
taro tonga - bskt	43	-	99	13	-	-	155
taro tonga - bundle	27	54	51	104	22	-	258
tapioca - bskt	15	219	295	287	-	-	816
Native fruit							
coconuts, green - ea	50	799	519	374	-	-	1,742
coconuts, dry - ea	-	50	-	-	-	-	50
coconuts, dry - pile	8	18	10	4	-	-	40
coconuts, dry - bskt	41	35	57	117	-	-	250
pawpaws - ea	14	126	25	20	-	-	185
pawpaws - bskt	17	3	14	5	-	-	39
Introduced fruit							
lemons - pile	1	38	2	7	-	8	56
pineapples - ea	-	2	-	-	-	-	2
watermelons - ea	300	1,333	2,578	-	-	-	4,211
soursop - ea	-	-	2	-	-	-	2
Native vegetables							
pele - bundle	8	30	87	47	-	-	172
taro leaves - bundle	26	185	339	442	-	-	992
Introduced vegetables							
beans - lb	-	60	20	30	-	-	110
beans - pile	40	452	18	-	-	-	510
cabbages - ea	159	4,821	546	20	610	-	6,156
cabbages - pile	-	27	-	50	-	-	77
cabbages - lb	-	20	-	-	-	-	20

Table 3.29 (continued)

Produce offered (type and sale unit)	Tongatapu				'Eua	Ha'apai	Total
	Nuku'alofa	Central District[a]	Eastern District	Western District			
cabbage - bskt	-	-	-	-	12	-	12
Chinese cabbage - ea	-	60	190	5	-	-	255
capsicums - pile	-	12	140	-	90	-	242
capsicums - bskt	-	1	-	-	-	-	1
carrots - pile	-	212	60	-	-	-	272
carrots - lb	40	-	120	120	-	-	280
carrots - bskt	-	4	-	-	-	-	4
corn - pile	-	-	-	32	-	-	32
cucumbers - ea	-	100	30	-	-	-	130
cucumbers - pile	-	91	214	-	-	-	305
cucumbers - lb	-	90	-	45	-	-	135
eggplant - ea	-	33	-	-	-	-	33
eggplant - pile	-	4	-	-	-	-	4
lettuce, head - ea	-	468	142	20	-	-	630
lettuce, head - pile	-	47	-	-	-	-	47
lettuce - bulk	-	4	2	-	-	-	6
lettuce, leafy - ea	-	52	-	-	-	-	52
lettuce, leafy - lb	-	30	-	-	-	-	30
onion, imported - lb	-	-	-	84	-	-	84
onion, imported - bag	-	-	-	13	-	-	13
pumpkin - ea	8	18	10	8	-	-	44
silverbeet - ea	-	12	-	-	-	-	12
silverbeet - bundle	-	5	-	-	-	-	5
spring onion - bundle	-	293	-	-	-	-	293
tomato - pile	20	569	312	16	-	-	917
tomato - lb	-	-	70	348	-	-	418
tomato - bskt	20	13	210	-	-	-	243
turnip - lb	-	150	-	-	-	-	150
beans - bulk	-	1	3	-	-	-	4
spring onion - bulk	-	-	10	-	-	-	10
Meat and eggs							
eggs - doz.	150	-	-	-	-	-	150
fish, salted - ea	-	-	-	-	-	23	23
octopus, dried - ea	40	-	236	-	-	10	286
kava - bundle	100	10	-	-	-	-	110

Note: a Excluding Nuku'alofa.

Source: Second survey of Talamahu Market, August 1976 (255 vendors).

Tables 3.30 to 3.41 are printed in the text, between pages 104-117.

Table 3.42

Age and sex of buyers

Age	Male	Female	Total	%
<20	162	127	289	44.4
20-29	72	72	144	22.1
30-39	31	51	82	12.6
40-49	29	45	74	11.4
50-59	15	26	41	6.3
>60	16	5	21	3.2
Total	325	326	651[a]	
%	49.9	50.1		100.0

Note: a Information unavailable for 14 cases.

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.43

Ethnicity of buyers

Ethnicity	Number of buyers	% of buyers
Tongan	645	97.0
Part-European	6	0.9
European	9	1.4
Other	5	0.8
Total	665	100.0

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.44

Buyer's place of residence

Place	Number of buyers	% of buyers
Nuku'alofa	590	88.9
Central District[a]	31	5.0
Eastern District	22	3.8
Western District	20	3.4
Total	663[b]	100.0

Notes: a Excluding Nuku'alofa.
b Information unavailable for 2 cases.

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.45

Buyer's mode of transportation

Mode	Number of buyers	% of buyers
bus	146	22.7
truck	10	1.6
taxi	12	1.9
own transport[a]	409	63.7
walk	65	10.1
Total	642[b]	100.0

Notes: a Including own car, bicycle and motorcycle.
b Information unavailable for 23 cases.

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.46

Frequency of buyer's market attendance

Frequency	Number of buyers	% of buyers
once a week	412	63.7
twice a week	108	16.7
thrice a week	48	7.4
more than thrice	44	6.8
other	35	5.4
Total	647[a]	100.0

Note: a Information unavailable for 18 cases.

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.47

Proportion of food for household consumption purchased at market

Proportion	Number of buyers	% of buyers
very little	188	29.2
about a quarter	29	4.5
about a half	42	6.5
about three quarters	11	1.7
more than three quarters	42	6.5
all	331	51.5
Total	643[a]	100.0

Note: a Information unavailable for 22 cases.

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.48

Amount of money spent at market by the buyer

Amount spent	Number of buyers	% of buyers
0-50¢	41	6.2
51¢-$1	43	6.5
$1.01-$1.50	35	5.3
$1.51-$2	37	5.6
$2.01-$3	60	9.0
$3.01-$4	61	9.2
$4.01-$5	66	9.9
$5.01-$10	237	35.6
$10.01-$20	71	10.7
>$20	14	2.1
Total	665	100.0

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.49

In text, on page 121

Table 3.50

Number buying each food type, and number of sale items bought

Produce (type and sale units)	Number purchasing type	% of buyers[a]	Total number of sale items purchased
Staples			
bananas - bunch	27	4.1	38
bananas - bag, bskt	90	13.5	124
bananas - hand	19	2.9	29
hopa - bunch	11	1.7	14
pata - bunch, bag, bskt	5	0.8	5
sweet potatoes - bskt	163	24.5	221
giant taro - ea	50	7.5	93
giant taro - bundle, bskt	6	0.9	7
taro futuna and tea - bskt, bag	365	54.9	687
taro tonga - bskt, bundle	37	5.6	50
yams - bskt	65	9.8	81
tapioca - bskt	179	26.9	248
potatoes, imported - lb	1	0.2	20
potatoes, local - lb, bulk	12	1.8	15
Native fruit			
coconuts, green - ea, bskt	31	4.7	56
coconuts, dry - pile, bskt	160	24.1	185
pawpaws - ea, pile, bskt	42	6.3	55
Introduced fruit			
lemons - pile, bskt	26	3.9	36
pineapples - ea	2	0.3	3
watermelons - ea	141	21.2	223
sugarcane - bskt	1	0.2	1
Native vegetables			
pele - bundle	14	2.1	32
taro leaves - bundle	296	44.5	1,005
Introduced vegetables			
avocados - pile	3	0.5	17
beans - pile, lb, bundle	32	4.8	38
cabbages - ea, pile	121	18.2	304
Chinese cabbages - pile, bskt	8	1.2	13
capsicums - pile	15	2.3	22
carrots - pile	47	7.1	67
corn - pile, bskt, lb	8	1.2	13
cucumbers, ea, pile	11	1.7	22
head lettuce - ea, pile	44	6.6	110
leafy lettuce - ea, pile	18	2.7	48
eggplant - ea, pile	3	0.5	4

Table 3.50 (continued)

Produce (type and sale units)	Number purchasing type	% of buyers[a]	Total number of sale items purchased
onions, imported - lb, bulk	11	1.7	13
onions, local - pile	2	0.3	3
spring onions - bundle	55	8.3	84
pumpkins - ea	2	0.3	2
radishes - pile	1	0.2	2
tomatoes - pile, lb, bulk	204	30.7	334
turnips - lb	2	0.3	4
Meat and eggs and fish			
eggs - ea, doz	11	1.7	27
fish, fresh - string	3	0.5	5
fish, salted - ea	1	0.2	1
jellyfish - wrap	3	0.5	8
seaslugs - wrap	1	0.2	1
shellfish - bskt	6	0.9	10
octopus, dried - ea	4	0.6	5
pigs, live - ea	1	0.2	1
Prepared food			
eggs, boiled - ea	1	0.2	4
peanuts, roasted - pkt, bag	4	0.6	11
Tongan pudding - wrap	1	0.2	n.a.

Note: Percentages are calculated from the total number of buyers interviewed (665).

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.51

Total amounts spent on various food types by buyer's ethnic group

Produce (sale item)	Total amount spent on produce item ($)			
	Tongan[a]	Part-European[b]	European[c]	Other[d]
Staples				
taro futuna and tea	830.60	1.20	-	10.20
yam	443.30	6.50	6.00	-
sweet potato	307.40	3.60	-	1.20
tapioca	240.60	-	-	-
banana	119.90	0.50	0.90	1.60
potato	17.30	-	3.60	-
all other	159.90	-	-	-
Total	2,119.00	11.80	10.50	13.00
Native fruit				
coconut, green	3.85	0.05	0.05	0.45
coconut, dry	53.70	-	-	0.60
pawpaw	14.00	-	1.00	-
Total	71.55	0.05	1.05	1.05
Introduced fruit				
watermelon	124.45	2.60	1.80	3.50
all other	6.10	-	1.20	0.10
Total	130.55	2.60	3.00	3.60
Native vegetables	105.70	0.20	-	0.10
Introduced vegetables				
tomato	59.55	1.00	0.90	0.40
cabbage	52.60	-	1.10	0.50
all other	66.90	1.30	7.95	2.05
Total	179.05	2.30	9.95	2.95
Meat and egg	42.64	-	0.40	3.00
Prepared food	2.06	-	-	-
Total	2,650.55	16.95	24.90	23.70
% of total spent	97.6	0.6	0.9	0.9

Notes: a Number = 645 or 97% of total number of people interviewed.
b Number = 6 or 0.9% of total number of people interviewed.
c Number = 9 or 1.3% of the total number of people interviewed.
d Number = 5 or 0.8% of the total number of people interviewed.

Source: Surveys of buyers, Talamahu Market, August 1976.

Table 3.52

Amount spent on each produce category by ethnic group as a percentage of total spent by that ethnic group

Produce category	Tongan	Part-European	European	Other
staples	79.9	69.6	42.2	54.9
native fruit	2.7	0.3	4.2	4.4
introduced fruit	4.9	15.3	12.0	15.2
native vegetables	4.0	1.2	-	0.4
introduced vegetables	6.8	13.6	40.0	12.4
meat and eggs	1.6	-	1.6	12.7
prepared food	0.1	-	-	-

Source: Surveys of buyers, Talamahu Market, August 1976.

Chapter 4

Points for consideration

This study has dealt with two sides of the food distribution and consumption patterns in Tonga. One side, represented by retail stores, relates almost exclusively to imported foods. The other side, represented by the produce market in Nuku'alofa, concerns almost exclusively locally produced foods, in particular the staple root-crops upon which most Tongans depend. The following paragraphs raise a number of points which have emerged from the study and which merit further consideration.

Retail stores

The proliferation of small retail stores in Tonga deserves careful attention for it plays an important part in increasing the national import bills. The more trade stores there are, the greater is the demand made on importers and wholesalers for goods to stock them with. It should be made clear to the public that the possession of a dream, a small capital and an inadequate knowledge of commercial practices is not a sound basis for embarking on doubtful enterprises which will, in the long run, be detrimental to would-be storekeepers, their customers and the nation as a whole.

The laissez-faire system operating at present benefits mainly the importers and their overseas connections. A more selective granting of trading licences is necessary, with the number of stores in any given area, whether it be a village or a town section, determined by the size of the population of that area. This will help to encourage the growth of successful enterprises which will in turn help to ameliorate price inflation. The success of the few well-run co-operative stores in Tongatapu is largely due to the ability of these stores to charge lower prices.

Stricter conditions for the establishment of stores should be set out. One of these may be that only stores of certain specified size in terms of capital should be allowed

to operate. Another may be a minimum initial educational qualification, with due consideration given to experience and demonstrated ability.

Basic courses in accountancy and store management should be offered regularly in regional centres or through media and correspondence; and storekeepers who have had no previous training or adequate experience in relevant fields should be required to take them.

More encouragement through financial assistance (which is non-existent at the moment) and other incentives should be given to co-operatives and to individuals who enter the commercial field seriously and on a full-time basis. Others, especially those who set up stores largely for cutting down their own personal expenses, should be discouraged so as to give a better chance of success to those with a more serious business intent.

As far as stock is concerned, it may be desirable to encourage, by public education and by differential tariff structures, both decreased reliance on nutritionally undesirable goods such as sugar, white flour and poor quality meat; and increased consumption of the wide range of locally produced fruits and vegetables. Benefits would accrue to the health both of the population and of the trade balance.

Proteins

Given the growing population of the kingdom and the already diversified consumption expectations of the people, the import of foods and other grocery items will continue to grow. The government is very much aware of the gross trade imbalance and has taken measures to redress the situation. But the current trend seems to be the encouragement of more exports in order to pay for more imports. This has had some ironic results. For example, although the demand for fresh fish in Tongatapu has never been adequately supplied, much of the catch of the government-owned deep-sea fishing vessels has been taken to canneries in Pagopago and Levuka for the much-needed foreign earnings. Whether or not this has had much effect on redressing the cost of food imports seems to be of less importance than the fact that whilst good quality fresh fish is sent overseas, Tongans continue to buy imported frozen and canned meat and fish of very poor quality. With regard to fish, the priority should be

rearranged so that the domestic market is supplied with adequate and good quality protein foods first before anything is taken to foreign canneries. The health of the nation should be given the first priority. At the same time, encouragement of local fishing in Ha'apai and Vava'u could help to even out the present regional inequalities.

Concerning the supply of meat, the present emphasis on raising beef cattle is laudable but in the long run it may not be the appropriate answer to our national needs. It is true that it is easier to raise cattle, which feed on plants, than it is to raise commercial broiler chickens and pigs on imported feeds. But the land area of Tonga, when we consider also the extent of land needed for agriculture, is too small for raising beef cattle to any satisfactory level. Perhaps a reconsideration of the poultry and piggery schemes, which do not require nearly as much land as cattle, is called for. The collapse of the recent (broiler) poultry and piggery schemes was due largely to the wholesale introduction either of methods not suitable for Tonga or inadequate planning. A reconsideration of the poultry and piggery schemes will have to take into account locally produced animal feeds in order to overcome the past problems of shortages in feeds and the wholesale destruction of animals. The proposal that the coconut oil mill being developed will produce protein feeds as a by-product should, if it eventuates, be a boon to the local commercial production of meat from chickens and pigs. In addition, attention could be paid to the use of waste digesters to produce methane gas, algae and fertilisers, which would further diminish reliance on imports.

Agriculture

At present Tonga is primarily an agricultural country which could perhaps do well to aim for self-sufficiency and appropriate technology. Waste digesters have already been mentioned. The continued, or increased use of horses may also be worth encouraging, both for transport and for ploughing. Such technology may be slower but it does not require petrol imports and it suits the nature of land-holding in the kingdom.

The possibility of using local fruits and vegetables for the production of such items as jams, marmalades, preserves, chips, crisps, chutneys and sauces may also be worth investigating: although the difference in the trade balance

would be small, such enterprises would also offer some employment opportunities and make good use of seasonal and perishable produce which otherwise goes to waste.

Finally, before Tonga actually faces the problem, some serious thought should be given to the probability that as export of staple root crops rises, there is a threat of local shortages and higher costs of staple foods in Nuku'alofa at least. This has already happened to the price and availability of kava and good quality bananas. Shortages in imported foods usually lead to nothing more than a minor inconvenience for the vast majority of Tongans. But if root crops are exported regularly in large quantities, the resulting shortages and high prices will not only cause real hardship to thousands of people, but will intensify the need for the import of more foods of nutritional quality far inferior to the local fresh products. Export of staple crops may rightly be encouraged, but at the same time it is important to ensure that the local market, now being deprived because the quality fresh fish is being sent overseas, is never short-supplied with the basic and nutritious foodstuffs of Tonga.

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Epeli Hau'ofa holds the degrees of B.A. from the University of New England, M.A. from McGill University, and a Ph.D from the Australian National University. He has undertaken field research in the West Indies, Papua New Guinea and in his native Tonga, and has covered most of the South Pacific islands as a consultant. He tutored at the University of Papua New Guinea, worked as a Research Officer at the University of the South Pacific, and was a Visiting Lecturer at the University of New South Wales. He now works for the Government of Tonga and co-edits the Tongan literary journal, Faikava. Among his publications are ***Our Crowded Islands*** and ***Mekeo*** which is being published by the Australian National University Press.