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Agricultural Marketing in the South Pacific

FAO Sub-Regional Office for the Pacific

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Market scene from Suva Market Fiji
Kava market stand, Lautoka, Fiji

Foreword

For the South Pacific Island region the issue of improved marketing of agriculture produce and market development has a long history. For decades, agricultural sector planners, heads of agricultural departments, experts of technical support agencies and private sector companies have searched for ways and means to overcome marketing constraints and support the development of sustainable domestic and export market opportunities. There have been success stories, but also numerous failures.

As a step towards addressing the topic of agricultural marketing, FAO commissioned country papers on agricultural marketing in the seven FAO member countries in South Pacific. The analysis of these country papers formed the basis for an “FAO Regional Workshop on Improved Agricultural Marketing Development” held in Apia, Samoa, in April 1999. The workshop covered three major topic areas, namely:

- how to overcome constraints to efficient marketing by focusing more attention on the provision of marketing extension services, timely market information and adequate market infrastructure;
- requirements for export market development with regard to quarantine, effective post-harvest handling, and the opportunities and threats Pacific Island States are facing on international markets; and
- how to promote the development of sustainable market-oriented production systems, by way of overcoming socio-economic constraints and furthering production skills and capacity building.

This publication is based on a synthesis of the country papers prepared for above workshop and has been revised taking into account the conclusions and recommendations developed during the course of the workshop’s deliberations. It is one of two publications resulting from the workshop. The other is entitled “Linking market development to farming systems in the Pacific Islands”(SAPA 1999/2).

It is to be hoped that this paper will be of value for governments, international organizations, the private sector and non-governmental organizations in planning activities which can be carried out to reduce the classical marketing problems in the Pacific Islands region caused by isolation, climate, limited markets and the cost and frequency of transport. FAO believes that the publication can make a significant contribution to improved marketing of agriculture products and, thus, to sustainable economic development in the Southwest Pacific.

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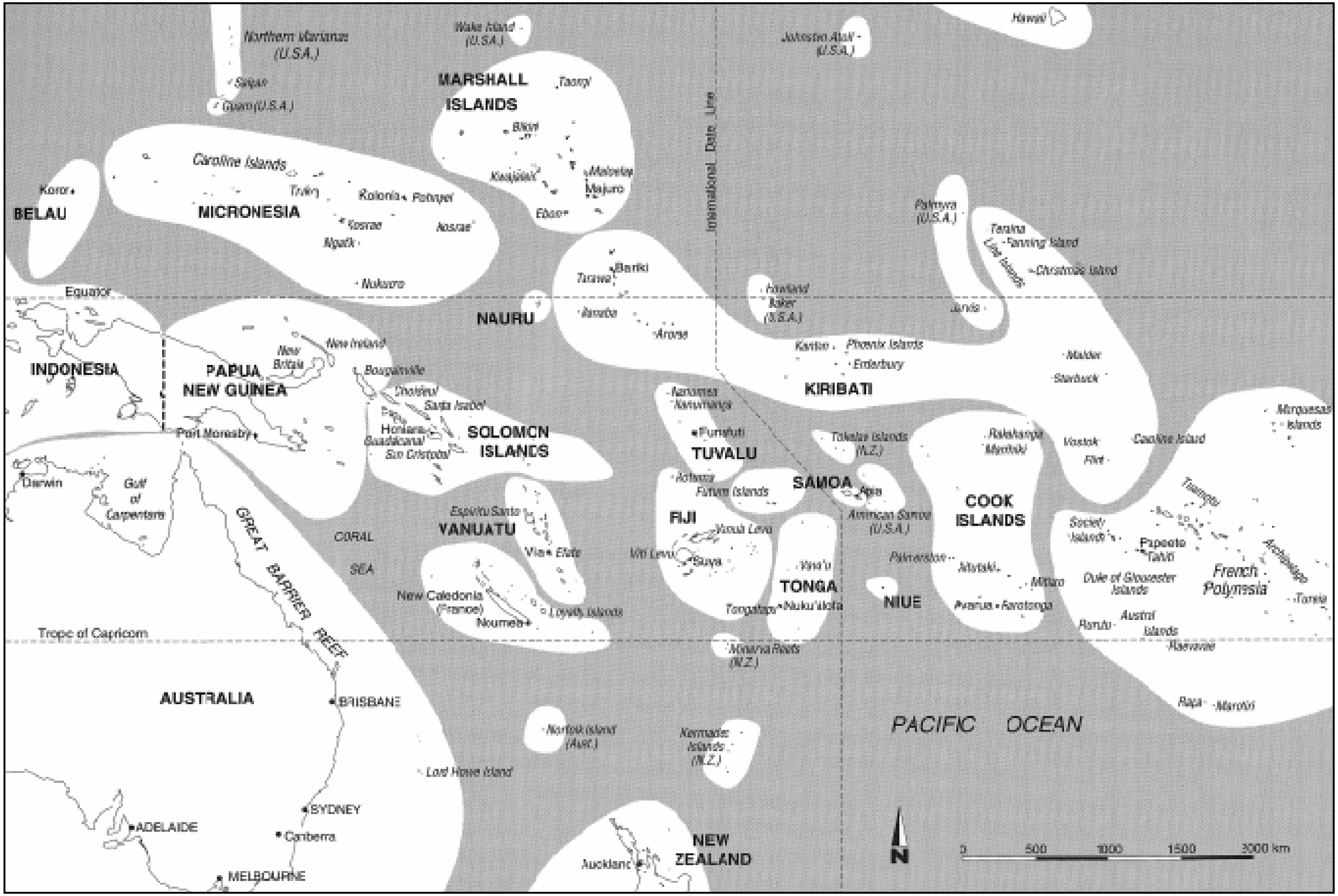

1 Introduction

This report aims to synthesise individual country reports from the seven FAO Member Countries in the South Pacific, i.e. Cook Islands, Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu which were prepared for FAO's Sub-Regional Workshop on Improved Agricultural Marketing Development[1]. Use has also been made of other reports, including those prepared in connection with various FAO projects in the region, of the author's own experiences and of other sources within the region.[2]

The report covers both domestic agricultural marketing and export marketing. The main concern of FAO's Agricultural Marketing Group[3] is to promote improved *domestic* marketing as well as the marketing of export crops up to the point of export, and to a certain extent this report reflects that preoccupation. However, we recognise that the small size of most island economies means that farmers wishing to expand production and increase their incomes look mainly to the possibility of expanding exports. In most, if not all, countries the value of agricultural production for export far exceeds that of produce sold on the domestic market, although it does not, of course, exceed the value of produce consumed domestically, as subsistence production remains very important in the region.

While there are significant differences in the pattern of agricultural production in the seven countries, from a marketing standpoint the similarities are perhaps more important than the differences. Firstly, and obviously, the countries are made up of islands. Most of those which are inhabited have relatively small populations, which means that the difficulties associated with sea transport are compounded by the small quantities of produce which the islands have to sell and the small quantities of goods they can afford to buy. Some islands in the Solomons and Cooks, for example, are serviced by boat monthly, or even less frequently. This obviously has implications for the types of crops which can be grown for sale. Several countries continue to subsidise a limited number of shipping services, without which subsidies many islands would receive no or only infrequent visits. Even where shipping is available the vessels are rarely suitable for handling fresh produce.

Even the larger and more populated islands experience communications difficulties. For example, most fresh produce grown in the Highlands of Papua New Guinea has to be shipped from Lae to Port Moresby. There is no road from the Highlands to the nation's capital and air freight is very expensive.

The domestic demand for agricultural produce in the seven countries is relatively small. While some fresh vegetables and/or traditional produce are presently in shortage, this is mainly due to the abnormal climate (El Nino) or to disease (e.g. Taro Leaf Blight). In general,[1] farmers are able to satisfy "effective" demand, i.e. the demand which exists at the prevailing market price. However, there is a strong view that with the introduction of new farming techniques, farmers could increase their production to much higher levels, resulting in lower prices and, in turn, a higher "effective" demand. It remains to be resolved whether the reason farmers have failed to expand production to date is due mainly to a lack of necessary production skills or to the lack of an incentive to use them.

While export markets do, of course, offer greater potential than the limited domestic markets, supplying them is not without problems. Prices can fluctuate considerably and in the past decade have been largely disappointing. For the main commodities, accumulating sufficient quantities at individual export ports can cause difficulties. International vessels will only be prepared to visit a very limited number of ports and will require reasonable quantities to be available for shipment. Transferring smallholder production of, say, copra and cocoa to such export ports can involve costly local shipping. In the case of horticultural exports, production is generally much less dispersed and mainly concentrated close to international ports and airports. These crops, however, face other problems, including the relatively small size of the New Zealand market, which has to date been the main recipient of produce from the South Pacific, difficulties in providing a continuous supply of reliable quality, quarantine requirements in all major markets and, increasingly, competition from outside the region.

Many of the problems briefly discussed above have been around for half a century or more, and are not easily overcome. It is clear that there are few magical solutions. That is not to say that nothing can be done and, hopefully, this paper will point in the direction of activities which can be carried out to reduce the problems caused by isolation, climate, limited markets and cost and frequency of transport.

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[1] This paper has been revised following the workshop and incorporates Conclusions and Recommendations based, in part, on those made by the workshop.

[2] A separate report of the workshop is available from FAO's Subregional office in Samoa.

[3] Country papers were prepared by Nga Mataio, Cook Islands; Banuve Kaumaitotoya, Fiji: Stephen Rambe, Papua New Guinea; Petelo Kavesi, Samoa; Henry Kapu, Solomons; Rosemary Taufatofua, Tonga; Peter Napwatt, Vanuatu. Additional information has been provided by Heiko Bammann, Gunter Heinz, Bob Macfarlane and Michael Daysh and by participants at the workshop. Errors and omissions are the responsibility of the author.

[4] http://www.fao.org/waicent/faoinfo/agricult/ags/agsm/marketin.htm

[5] Yams may be an exception,

2 Producing for the Market

The South Pacific has the capacity to grow a considerable range of products. Most tropical or sub-tropical products, and many crops originating in temperate areas, can be and are being grown. The coconut is, of course, ubiquitous and all countries have at one time exported copra and/or coconut oil. Cocoa is important in Papua New Guinea, the Solomons and Vanuatu. At one time it was the major export of Samoa but years of neglect and several hurricanes have led to production now being negligible although there are efforts to rehabilitate the industry. Coffee production for export is largely confined to PNG, where it is the major crop for the Highlands. Small quantities are produced for export on the islands of Santo and Tanna in Vanuatu. Tea is also grown on estates in the Highlands of PNG. Papua New Guinea and the Solomons both grow oil palm for export as palm oil and palm kernel oil. Oil palm production has expanded rapidly in PNG, as it has worldwide. Fiji is a major sugar exporter.

Crops discussed above are commodities traded on world markets. While, in some years, farmers may find prices to be disappointing it is rare that they cannot sell all they can produce (past restrictions on coffee exports under the International Coffee Agreement are a notable exception). Over the years, however, South Pacific countries have diversified into a whole range of other crops. These have often been temporarily successful but have sometimes been difficult to sustain because of market failure, poor returns, climatic factors, or all three. Examples include spices and passion fruit in Papua New Guinea, bananas in Samoa, Tonga and the Cooks, and watermelons in Tonga. It should perhaps suggest a note of caution to policy-makers who are keen to diversify the region's agriculture in order to achieve export growth. Both production and markets can be very unreliable, and heavy investments in diversification need to be very carefully considered. The current enthusiasm for "organic" exports, for example, must be seen in this light and will be discussed below.

All of the products discussed in the paragraph above were promoted at a time when there were clearly identified market opportunities. Sometimes, however, farmers are actively encouraged, by governments, individual politicians and others, to produce for both domestic and local markets, when there is only a limited export market and when the domestic market is easily glutted. For example, the northern Vanuatu island of Santo has witnessed heavy plantings of citrus and, more recently, ginger, much of which remains unharvested. Care needs to be taken to ensure that farmers are only encouraged to undertake production in response to clearly identified market demand and that they are likely to be able to meet this demand from the standpoints of quantity, quality, price, logistics and continuity.

There are indications that farmers producing for domestic fruit and vegetable markets are increasingly growing crops specifically for those markets rather than just selling production which is surplus to their own consumption requirements. For example, the Vanuatu report indicates that farmers grow some crops, which they do not presently consume at all, e.g. eggplant. In doing this, however, they are very much constrained by seasonal and climatic factors, although the influence of these factors varies significantly from country to country and in some cases within countries. For example, in PNG production around Port Moresby is limited in variety and is highly seasonal, due to the long dry season, whereas in the Rabaul area climate has only a limited impact. Attempts to produce for the off season and so obtain higher prices have not generally been successful. This may reflect a basic conservatism but is more likely a consequence of the greater technical skills required to produce in the off season and various cultural and social constraints. As the Vanuatu case study explains: "Women are aware that tomatoes in the months of November to March are getting high prices…. [but] …don't plant tomatoes in those months because the risk of losing a crop is too high (due to the rain and humidity) and…..it would require that they go to the gardens at Christmas time… [when] …..the family is busy with preparations for the festivities, marriages and custom ceremonies and the school kids are home." The report adds that during that period tree fruit is available which can be easily harvested and sold in the market.

Domestic Marketing

Market truck with various horticulture crops in Port Vila, Vanuatu.

3 Domestic Marketing

Traditional diets in the seven countries, while varying considerably, generally consist of staples (roots, tubers and sago) and greens supplemented by fish, meat (primarily pork) and, in all except the highland areas of Papua New Guinea, coconut. With the exception of the relatively few families who remain outside the cash economy, inhabitants of the South Pacific have depended to a greater or lesser extent on imported products, particularly rice, cheaper cuts of meat and canned products. The relatively inexpensive nature of many imported processed products has had important implications for Island farmers, in that it can be very difficult to compete with these products in a profitable way. However, recent declines in the values of several of the region's currencies do appear to offer farmers opportunities for import substitution.

3.1 Horticultural products, roots and tubers

In most countries of the world farmers usually find that it is not an efficient use of their time to sell their own production at retail markets. Traders either buy at the farm or farmers meet with traders at assembly or wholesale markets. In many parts of the South Pacific, however, such a marketing system has so far failed to develop. In parts of PNG, and in Vanuatu, the Solomons and Tonga, farmers either sell directly to consumers at urban markets or, if they cannot easily reach those markets, consign produce by vessels to relatives who will then take the produce to market. In Samoa and Tonga, farmers sell their produce to retailers in the market or direct to consumers. These retailers normally only buy at the market and rarely visit villages to purchase produce. If any significant trading between the village and the market has developed it is among the farmers themselves, with one farmer buying from others in order to increase the quantities he or she can take to the market.

This lack of trading in produce for domestic markets may have several reasons. Firstly, it may be cultural, in that there is reluctance in many parts of the region to see others doing well, which may include doing well from trading. In Melanesia, the general belief that "what is my relative's is also mine" may also act as a disincentive to trade. At a simpler level, the fact that distances between farms and the main markets are relatively short and thus allow farmers to visit the market and return home on the same or following day may preclude the need for traders. The markets of Honiara, Vila, Santo, Nuku'alofa, Apia and Avarua are at maximum a few hours drive from all farmers on the respective islands. To a certain extent the same point can be made about some of the urban markets in Papua New Guinea, particularly in the Highlands and on the main islands. Also, many farmers may not regard farming as an activity, which should take up all of their time. While traders offer the advantage of economies of scale and time in marketing, if time has no significant cost to the farmer then, providing transport costs are reasonable and transport can be easily obtained, he or she can earn more by going to the market. A final consideration is that rural people often need to make visits to urban areas in order to purchase items which are expensive in their villages. In some countries, e.g. Samoa, those farmers who are most market-oriented are also those who run small shops in the villages. Their transport costs for fresh produce can be reduced by having available a return load.

In Fiji, perhaps reflecting the country's cultural diversity and the greater size of the main island, there is a wide range of marketing methods for fresh produce. In regions where the bulk of production is grown at specific locations and in reliable quantities, buyers often purchase the produce at the farm gate. Although this practice mainly applies to export produce it is not unknown for the domestic market. More common is for farmers to transport their produce to traders, either at their premises in urban areas or at the market itself. In some towns traders will await farmers at the bus station, hoping to buy there and take the produce to the market themselves. In several of Fiji's municipal markets farmers are allowed to retail their own produce only on Fridays and Saturdays, when they are allocated space outside the main market halls. On other days, they are forced to sell their produce to the permanent retailers. Vanuatu, which lacks permanent market retailers, applies different restrictions. Both Vila and Luganville markets allocate market days to producers from specific parts of the islands of Efate and Espiritu Santo. In the latter, a farmer can only visit the market once a fortnight while in the former producers can visit the market on one reserved day a week and on Fridays and Saturdays. Such arrangements would appear to exclude the development of middlemen. On a few occasions in the past they have also led to a complete absence of supply, when farmers from the designated areas have been unable to reach the market due to floods.

Although most farmers who sell direct to retailers in the major towns farm on the island where the market is situated, there are notable exceptions. In Tonga, 'Eua island is a major producer of taro for both the domestic market and for export. In Vanuatu, producers on the southern island of Tanna have started to visit Port Vila to sell directly in the market. In Fiji, farmers travel from the Lau Group by night boat, sell their produce outside Suva market and then return home.

Non-perishable produce is often shipped in small quantities from outer islands for sale by relatives in the main town(s) or, very occasionally, on consignment to traders. Yam, taro, sweet potato, Irish potato, plantain, green banana, citrus and, of course, coconuts can bear reasonably long sea journies. The infrequent and unreliable nature of inter-island shipping does, however, present major constraints. Farmers are obliged to harvest to coincide with the arrival of the ship and this is not necessarily the optimum time for harvest. Further, they do not always know when the vessel will arrive, or whether space will be available. These problems are compounded by poor wharf facilities. Not only are the wharves often inadequate or even non-existent but, importantly for fresh produce, they often lack shelter, resulting in the produce being exposed to the hot sun while awaiting the vessel.

In most countries the main physical markets are relatively new. Honiara [6], Nuku'alofa and Apia have good markets, as does Port Vila which, having only recently upgraded its central market, has plans to expand it yet further. Given the general standard of such markets it may seem petty to be critical. However, there is evidence that some have been designed without any reference to the people who have to use them, an error which should be avoided in the future. In most cases municipalities seem to regard market fees as ways of raising revenue, with the fees far exceeding the costs of running the markets (although not, perhaps, the capital costs which are generally funded by donors). The twelve municipal markets in Fiji are generally congested and in need of improvement, although improvements are planned for Suva and two other centres. Markets in Papua New Guinea are in similarly poor condition and their importance seems to be generally unappreciated by the local authorities. Crowded markets can have major implications for food marketing. Not only are they likely to be unhygienic but the fact that they are congested means that growers cannot enter and buyers stay away because of overcrowding and, in some cases, security concerns. Attractive, uncongested markets, on the other hand, not only facilitate more efficient produce marketing but also offer the opportunity for the development of small businesses such as catering services. Unless the issue of the standard of markets is addressed, supermarkets are, in time, likely to gradually take an increasing share of fresh produce sales, simply by providing a more attractive environment in which to shop.

Little information is available concerning the availability and condition of rural markets. In Vanuatu, a recent survey carried out under an FAO project concluded that informal markets were growing in number but that in only one or two places had formal structures been constructed. In the Solomons most provincial centres have market sheds but these are often overcrowded. Savai'i island in Samoa has a new market.

Official market places have tended to play an important role in agricultural marketing in the South Pacific. In some towns they have represented almost the only outlet for local produce and have acted as important and vibrant points for both commerce and social interaction. There is evidence that the situation is now changing. For example, in Samoa, Tonga, Vanuatu and Fiji farmers are establishing roadside stalls to sell produce fresh from their gardens although, in the case of Samoa it is reported that the prices can often be higher than those in the Apia market. In Vanuatu, supermarkets buy some local produce from farmers but mainly concentrate on imported produce. Smaller stores tend not to handle fresh produce. A noticeable recent trend in Port Vila, however, has been for farming families to establish small market stalls at the side of roads in the suburbs. This development can be expected to continue, given that consumers in the suburbs presently have to travel by bus (minivan) to the centre of the town if they want to buy a few tomatoes. In Tonga, a number of stalls have recently been established on the road between the airport and Nuku'alofa. In Fiji, roadside stalls are giving rise to some concern from the standpoints of hygiene and traffic congestion. Local authorities are planning to establish more formal facilities.

Two specific examples of fresh produce marketing which do not fit the general pattern are found in Papua New Guinea and Fiji. In PNG considerable quantities of temperate vegetables and fruits such as potatoes, sweet potatoes, carrots and cabbages, oranges, tomatoes, beans and cauliflower are grown in the Highlands and transported to the cities of Lae, Madang and Port Moresby, as well as to the growing number of mining sites. In the case of non-perishable supplies to the capital, this requires a 12-hour journey down the Highlands Highway followed by container shipment from Lae, where handling and consolidating facilities are poor, around the coast on a three-day voyage. Perishable and high-value crops, such as tomatoes, broccoli and capsicum, are usually sent as air freight on passenger flights. Marketing arrangements for produce from the Highlands are complex and constantly changing. There are some fairly well-organized companies but much of the produce, particularly sweet potato, is marketed by the growers themselves or by “traders” who are not really committed to the business but may decide to make occasional trips. By weight, half of the quantity marketed to Port Moresby is sweet potato, which is sold door-to-door or in the markets. Irish potatoes are mainly sold direct to fast food bars for chip making. Supermarkets buy vegetables either as the result of semi-formal arrangements or when growers/traders visit them and they are in short supply.

In Fiji some farmers are producing fresh produce under contract with larger buyers, market wholesalers and fast-food chains. At present these tend to be the larger farmers only. However, there is a clear trend worldwide towards contract farming and this could be an area for further development in the South Pacific, particularly in Fiji and PNG. Also in Fiji there is considerable specialised production for the country’s hotel industry.

In almost all cases packaging in the seven countries is fairly basic and tends to expose the produce to considerable damage. Traditional materials are commonly used, most usually baskets woven from coconut fronds. While such baskets can be considered adequate for most produce for short journies to urban markets they are often unsuitable for temperate crops such as tomatoes and are certainly unsuitable for long sea voyages. There is a slight, but noticeable, trend towards using more modern packaging. However, such packaging is rarely custom built, the most common alternative to traditional packaging being crates originally used for beer or soft drinks. For longer journies, such as those in Papua New Guinea described above, the use of more appropriate packaging is fairly well developed, corrugated cartons now being well established for use with the more perishable produce. Post-harvest treatment of fresh produce is usually rudimentary in most countries and consists mainly of wetting of green vegetables to preserve freshness while they are displayed at the market. Some improvements have been introduced in the Highlands of PNG, however, including the curing of potatoes prior to shipment. Throughout the region cool stores are mainly owned by exporters, importers and supermarkets and are not available for domestic marketing purposes.

With regard to pricing and selling techniques in local markets there are apparent differences between Melanesian and Polynesian practices in that Polynesian farmers tend to be more responsive to supply and demand conditions. In PNG, the Solomons and Vanuatu farmers take produce to the market with certain price expectations (something which is reinforced in Vanuatu by the practice of reserving certain days in the markets for different areas of the main islands—farmers travel to the markets in groups and sit with others from the same village) and are reluctant to lower their prices if the market is oversupplied.[7] At the end of the day they may lower prices for highly perishable produce but non-perishable produce is either taken home or given to relatives in the town. As previously noted, farmers in Fiji and Samoa often sell their produce to traders in the markets. They will normally accept the price on offer unless they have storage available close to the market. There is little evidence that Melanesian farmers will base a decision to go to the market on their knowledge of the prevailing price. In part this may be because the lack of price responsiveness to supply and demand means that the prices of staples change only slowly. In Samoa, on the other hand, it is reported that farmers with ease of access to Apia's market will monitor prices closely in order to identify a good time to take their (often pre-harvested) produce to the market.

In most countries formal weights and measures are not used for sales at markets. Produce sold at markets, especially fruit, is sold by the "heap" or "bundle" and more bulky staples are either sold individually or by the basket. Where it is felt necessary to adjust prices in the market this is often done by changing the size of the "heap" while maintaining the asking price per heap. Given the absence of formal weights or measures and the fact that farmers may only slowly adjust their individual asking prices to reflect market conditions, it is often the case that the asking price per kilogram will vary considerably from farmer to farmer, for what appears to be basically the same product.

Although marketing practices remain traditional in many areas, the pages above have hinted that there is a dynamic aspect to marketing in the region and that farmers' approaches to producing for the market are slowly changing. There is increasing evidence that farmers are now deliberately growing produce to sell at market rather than just selling crops which are surplus to their subsistence requirements. There are also indications that, difficult as it may be technically, some farmers are beginning to produce in the off season(s) in order to take advantage of higher prices.

As interest in markets and marketing grows, governments can play an important role in fostering this. Improving access to market information is one way in which farmers can become more aware of markets and profitable production opportunities. In Papua New Guinea, a market information service (MIS) was set up in 1989 under the auspices of the Fresh Produce Development Company. This organization was set up by the Department of Agriculture and Livestock with New Zealand financial and technical assistance and is now responsible for development work in the field of horticulture. The MIS in PNG presently disseminates prices in three languages in a monthly newsletter. When it was first set up it had been intended that the MIS would collect and disseminate prices much more frequently and that prices would also be broadcast on the radio. However, over time it was considered that other problems, such as transport and post-harvest handling, constrained marketing development much more than a lack of information. In Tonga, an MIS was set up in the late 1980s and broadcasts weekly market prices. There is no market information service in the Solomons, but in Vanuatu one has recently been established with assistance from FAO. This collects prices once a week in Port Vila and Santo markets and the prices are, in turn, broadcast on national radio giving farmers an up-to-date report on market conditions. In Fiji, AgTrade, a section of the Ministry of Agriculture, collects prices weekly in Suva (on a Friday) and Sigatoka and fortnightly in Lautoka, Ba and Labasa. These are disseminated by radio every Thursday. Thus, at a minimum, prices for Suva are six days old when broadcast and may be much more out-of-date for other locations, as they are transmitted by ordinary mail from the markets to AgTrade in Suva. The value of such delayed information for farmers is open to question and measures are being taken to improve the service. In the Cooks, a regular price information service was operated for some years until 1996 when the staff of the Ministry of Agriculture was cut back significantly and the MIS was a casualty. The Cook Islands country report concludes that there was no great need felt by producers for such information. In the case of those farmers living on the main island of Rarotonga this may have been an accurate assessment, given the small size of the island and the ease of obtaining information by word of mouth. In Samoa, the Central Bank publishes market prices monthly through a brochure and through articles in the Samoan Observer. Other local newspapers and Government and private radio stations also occasionally broadcast prices, but the frequency of such broadcasts is unreliable.[8]

Domestic Marketing

Market hall, fresh produce market in Lautoka, Fiji.

3.2 Livestock and animal products

Emphasis in the region tends to be on the short-cycle species of pigs and poultry. Beef production is really only feasible on some larger islands due both to the need for pasture and slaughter facilities, the latter requiring certain equipment which is not widely available. Problems for pig and poultry production include the availability of feed. The widespread practice of using coconut residues provides an inadequate diet for quality pork production, but importing the necessary feed may turn out to be as expensive as importing the meat.

Domestic marketing of meat and other animal products is perhaps most developed in Fiji and Papua New Guinea. However, particularly in Polynesia, the development of the domestic market is constrained by the availability of inexpensive imported meat in the form of cheap cuts such as mutton flaps, chicken backs and turkey tails. Two companies in Fiji also import boneless beef and mutton for canning, as do canneries in Madang and Port Moresby in PNG.

Papua New Guinea has large cattle herds in the Markham Valley and a pork industry with feedlots in Port Moresby, Lae and Goroka. PNG has been extremely successful in developing a frozen chicken industry based on locally raised chickens. A spin off of this has been a developing smallholder chicken industry. Farmers buy a carton of day-old chicks plus feed and feeding dishes, raise the birds and then sell them in their villages, at the roadside or in nearby markets.

There are two abattoirs in Fiji, one close to Suva and the other on Vitu Levu, and around six private slaughterhouses. More than half of the beef slaughtered is sold by farmers to traders who sell the meat to butchers "ex-abattoir." Other animals are sold through direct farmer-butcher negotiations, with the butcher being responsible for the slaughter costs. The Commercial Undertaking Unit (CUU) of MAFF is responsible for negotiating the sale of cattle from farmers, for which it charges a five per cent commission. In the case of pigs they are normally taken by producers to the abattoir or slaughterhouse, without the involvement of middlemen. CUU also assists here. Fiji has the only really significant dairy industry in the region. Dairy products are either marketed directly by registered farms or sold to a cooperative dairy, the only dairy in Fiji, which has a factory close to Suva and operates 31 chilling centres. Samoa slaughters around 4,500 cattle a year, all of which are consumed locally or exported to American Samoa. Festive occasions (faalavelave) account for 70 per cent of local beef consumption. In the case of pigs, a high proportion of households keep two or three sows, and there are five commercial producers.

Tonga has one public meat market in the centre of Nuku'alofa. Most domestically slaughtered meat is sold through this market due to inspection requirements. The country also has a fresh milk industry but the company, Tonga Dairy Processing, has encountered problems in making a profit. Part of the problem stems from the familiarity of Tongan consumers with UHT milk; fresh milk is considered to be too tasty. Further, a large proportion of consumers lack refrigerators. In the Cooks there is one abattoir, now operated by the Rarotonga Pig Farmers' Association. All local livestock is required to go through this facility, which is presently operating under capacity. In the Solomon Islands, the country report notes a significant increase in the raising of pigs, cattle and chickens on a commercial basis. As in most countries, regulations in the Solomons require health inspectors to inspect carcasses. This can cause problems due to the small number of inspectors, who cannot be everywhere at once. All the slaughterhouses in the Solomons are in need of repair, although all are presently operational. The lack of chilling facilities means that animals are slaughtered only when all cuts are pre-booked and paid. After slaughter the animal is butchered and packed in ice cubes for home delivery. In Honiara, which has an abattoir, the carcass is chilled for 24 hours before sale to local butchers. The fresh meat sector in the Solomons is run by the Livestock Development Agency, which has run into considerable financial problems. Vanuatu has abattoirs in Vila and Santo. These sell whole animals, dressed and cured, to local butchers. On other islands there is an informal market in beef, with animals being slaughtered for sale on market days. Tanna has a cooperative association, which markets beef daily. There has reportedly been a significant increase in cattle ownership in recent years.

3.3 Other agricultural products

The other main products marketed domestically could be described as "recreational" products, i.e. kava and betel nut. Kava is consumed throughout Polynesia, in Fiji and in Vanuatu where production and consumption has expanded rapidly in recent years. Unlike betel nut, kava has a significant and growing export market, which will be discussed below. Betel nut farmers in Papua New Guinea and the Solomons can make significant returns from the product, which is marketed both at urban produce markets and at the side of the road, most notably on the Highlands Highway near Lae in PNG.

Domestic Marketing
Yams and water melons and Talamahu Market, Nuku'alofa, Tonga.

[6] Honiara has three markets. The main central market is new but the other two markets still require upgrading.

[7] The Solomon Islands report suggests that betel nut provides an exception to this rule.

[8] Difficulties faced with operating MIS including correctly measuring prices, problems with dissemination and the need to ensure sustainability are discussed in depth in *Shepherd, Andrew W. "Market Information Services – Theory and Practice," AGS Bulletin 125, FAO, Rome, 1997*

4 Export Marketing

In general there is no discernible upward trend in the level of agricultural exports. Poor prices in recent years have been a constraint to production expansion for traditional commodities, while small markets have presented problems for roots and tubers and non-traditional crops. However, the extent to which the level of exports is a result of marketing constraints must merit further consideration and research. Production constraints including such factors as land availability and tenure, lack of knowledge about appropriate technologies, and insufficient availability of labour can significantly limit production, as can numerous social and cultural factors. In the Cooks, Samoa and Tonga, a high level of remittances, together with high per capita aid flows, may be a disincentive to increasing production. In much of Melanesia, the cultural imperative to share resources with relatives may provide little encouragement to farmers to increase their incomes.

4.1 Commodities

The traditional export commodities of copra (coconut oil) and cocoa continue to play an important role in most of the South Pacific. Sugar is a major component of Fiji's economy. Coffee is the main export crop in Papua New Guinea. Palm oil is produced in PNG and also in the Solomons. Bananas have in the past been a major export for the Cooks, Samoa and Tonga. They are considered separately, after this section.

The world-wide trend away from government marketing services has also been seen in the South Pacific, with the closure of the Tonga Commodities Board and the Cocoa, Copra and Banana Boards in Samoa. In Papua New Guinea, only copra is handled by a Board, the other crops being exported by the processors and/or by private exporters. If anything, the PNG Copra Board is strengthening its position as it has recently expanded into coconut oil processing and the purchasing of limited quantities of cocoa. In the Solomon Islands, the Commodities Export Marketing Authority (CEMA) buys copra, cocoa and some spices and in Vanuatu, the Vanuatu Commodities Marketing Board (VCMB) handles copra, cocoa, kava and small quantities of other products. The Vanuatu country report envisages that the VCMB will eventually be phased out as a trading body but will retain regulatory powers.

While traders do buy copra and cocoa from farmers close to the farm gate, these products are mainly consigned by the farmer directly to the marketing board, coconut mill or exporter. In PNG all copra producers are registered and issued with a number. Those who do not travel with their copra to the nearest marketing board depot simply mark their registered number on the copra bags. Payment is eventually made by cheque, whereas farmers travelling with their copra to a Board depot can receive cash. There are 22 depots, of which eight are main depots and 14 sub-depots. The number and location of Board buying depots has always been the matter of some controversy, with politicians pushing for new depots in their area while the Board has attempted to restrict the number in order to control costs. Board depots are located at ports capable of attracting (with sufficient quantities of produce) international vessels. Sub-depots purchase copra but pay a discounted price to cover the cost of shipping it to a full depot. In the Solomons, CEMA has a network of Buying Centres and there are also private buyers. Copra is shipped from the Buying Centres and private buyers to Yandina, Honiara or Noro for export. In Vanuatu, farmers on Efate and Santo usually ship their copra direct to the VCMB depots. In other islands there are traders who both buy copra for onward sale to the Board and also those who buy green copra from farmers for drying and sale. In Fiji, there are four copra mills, two in the Lau Group, one in Lautoka and one on Vanua Levu. These, in the main, export their coconut oil to Australia, although some oil is used for soap making. In Samoa, farmers delivered their copra directly to the Samoan Coconut Oil Company, but this mill closed down, at least temporarily, at the end of 1998. In Tonga the coconut oil mill was closed down and sold to PNG. For a time some coconuts were exported to Samoa for conversion into oil, but, as noted, there is no longer a market for them. No copra is exported from Tonga, where it is now considered an uneconomic activity for farmers, and only small quantities from Samoa.

Cocoa in the Solomons and Vanuatu is handled in much the same way as copra. In Papua New Guinea the cocoa industry reportedly has a competitive marketing infrastructure, consisting of around one thousand wet bean dealers, 1,400 fermentaries and ten exporters servicing over 92,000 cocoa-producing households and a large number of plantations. However, the industry has suffered a number of setbacks in recent years including the Bouganville crisis and the volcanic eruptions in Rabaul, as well as low prices and quality problems. Coffee is also in the hands of the private sector in PNG. A large number of private traders buy cherries or parchment coffee from farmers, either for sale to or on behalf of 51 processing factories. There are 19 registered exporters. The other major commodities grown in the region, i.e. sugar and oil palm, are delivered directly to processing facilities. Here price setting is not competitive but based on agreed formulae, usually set with the involvement of the respective governments. Tea was formerly produced by smallholders in PNG but is now only grown on estates.

In general, the primary marketing of export commodities seems to present relatively few difficulties, except for producers living in remote areas with few shipping services or, in the case of PNG, for those few producers without road connection, who have to transport their coffee by air, at great expense. Perhaps the major problem facing the region concerns quality. Most governments have in operation fairly strict and detailed quality inspection services but these tend only to ensure that exports comply with basic minimum standards and they do not necessarily promote improved quality. In Papua New Guinea, copra and cocoa are inspected by Government inspectors from the National Agriculture Inspection and Quarantine Agency prior to sale to the Copra Board or private cocoa exporters; in Fiji copra is sampled by a Coconut Board grading officer prior to sale to one of the mills. Notwithstanding such inspections, there have been quality problems associated with commodity exports, e.g. for PNG's cocoa. To address these the Government of PNG recently decided to transfer extension functions from the Dept. of Agriculture to the industries themselves. It established the Cocoa and Coconut Extension Agency, and the Coffee Development Agency will take over coffee extension. In Vanuatu, steps to improve copra quality have included production and distribution of posters showing different copra grades, their characteristics and associated pricing. However, farmer-education programmes for both copra and cocoa have been negated by the fact that rural traders offer no incentives for higher quality. Further, a Copra Improvement Project subsidized construction of hot-air dryers and used radio programmes to promote farmer confidence in the investment. Subsidies to farmers have also been available in PNG, for the purchase of items such as coffee pulpers and cocoa fermenting vats.

Farmers, providing they have radios, are likely to be reasonably aware of price developments for the major export commodities. Prices are broadcast on a fairly regular basis in most countries. As noted earlier, prices for commodities have been generally disappointing for some time. This has led to governments introducing subsidies, at some considerable expense. In the Solomons the copra price stabilization scheme received injections of funds from STABEX in 1985 and 1989 and cash injections from the Government in 1990 and 1991 at a time when the Development Price Support Fund became insolvent. In Vanuatu, STABEX funds were utilised by VCMB to stabilise producer prices for copra and cocoa.

Papua New Guinea has a long history of price stabilization schemes for coffee, cocoa, copra and, later, oil palm. These were designed so that the support price would reflect the long-term world trend. Thus, if world prices were falling over several years then the support price would be gradually reduced every month. For many years this approach worked reasonably well, but the design of the schemes was unable to accommodate a long period of very low prices. In 1989 the Cocoa Stabilization Fund became depleted and in 1990 the Copra Fund ran out. This led the Government to guarantee commercial bank loans to both funds. By the mid-1990s the Copra Fund had been able to repay these loans but the Cocoa Fund has yet to repay any loans. In the case of coffee, loans between 1991 and 1994 totalled K135mn, more than for the other two crops combined.

The merits of PNG's stabilization policy have been much debated since they were first set up. Initially they were very favourably commented on by, among others, the World Bank, although the Bank subsequently appeared to change its mind. It has never really been very clear whether the purpose of the schemes is primarily to benefit farmers or whether their main objective is to provide for macro-economic stability. Nevertheless, the schemes were generally well received by smallholders, although not necessarily by the estate sector, which felt itself better equipped to manage the swings and roundabouts of price fluctuations than was the Government. However, after the funds all ran into difficulties the Government, according to the PNG country report, spent over K270mn on supporting them between 1991 and 1995. It might be questioned whether this was the best use of resources in terms of long-term development or whether investment in rural infrastructure and extension services may have paid better dividends. The Government is now reportedly reviewing the policy.

There is a small cocoa processing factory in Samoa, presently used both for the production of chocolate and of some small quantities of cocoa butter for export. Secondary processing of coffee (instant coffee) and cocoa (cocoa butter) has been considered in PNG but the economics of such factories in the producing country are rarely good. Instant coffee is normally produced from low-priced *robusta*, whereas PNG mainly grows high-grade *arabica*. PNG does have several companies that roast, grind and vacuum pack coffee for the domestic market and for export. In the case of cocoa butter, chocolate producers in the major markets tend to prefer to do their own processing because it enables them to blend beans from different sources. Processing of palm oil and tea must, however, be carried out close to the farm, given the nature of the product.

There is presently no coconut oil processing in Polynesia. On the other hand, there has been an increase in the proportion of copra processed into oil in Melanesia in recent years. Fiji, as previously noted, has four private mills, producing oil for the domestic soap industry and for export to Australia. Vanuatu presently exports only copra. The most notable changes have been in the Solomons and PNG. In the former, CEMA has established three joint-venture crushing companies with businesses owned by provincial governments, and others are planned. The companies crush the copra and ship the oil in 200 litre drums to one of the three export ports where the oil is decanted into larger tanks to await international vessels. These new small-scale processors overcome past problems associated with the inability to assemble sufficient quantities of copra in one location to justify investment in a large mill. Some cake is used locally as animal feed, but most is also exported. For many years Papua New Guinea had only one crushing mill, at Rabaul. However, as noted, the Copra Board has recently acquired a mill from Tonga.

Other coconut processing activities also merit consideration here. In the 1980s Australia funded a new desiccated coconut plant to replace Tonga's ageing factory. The new factory encountered many technical difficulties and never functioned. Coconut cream and other coconut products are produced by two private companies in Samoa and represent a significant export, although difficulties are presently being experienced on export markets as a result of competition from Asia.

4.2 Bananas

Until the mid-1980s bananas from the region were given preferential access to New Zealand. The Cook Islands, Samoa and Tonga all benefited from this arrangement and from considerable New Zealand aid designed to assist them to maintain their banana industries. However, occasional hurricanes, fungal diseases, high input costs, low yields and difficulties in matching the quality and consistency of fruit from Central America made the task impossible. The change in New Zealand's import policy effectively meant the end of volume banana exports from the region, as small-scale farmers were unable to compete with large producers elsewhere. This encouraged a search for alternative crops, most notably in Tonga where, as will be discussed below, the squash export industry became extremely important. Small quantities of bananas, including "organic" bananas, do continue to be exported, to meet the needs of Islanders living in New Zealand and to satisfy niche markets among consumers prepared to pay more for a different taste.

4.3 Roots and tubers

Roots and tubers are, or have been, important exports from Fiji, Samoa, Tonga and, to a lesser extent, the Cook Islands. Samoa has suffered from Taro Leaf Blight with the result that exports are now almost non-existent. Fiji's exports have increased as a result of the difficulties experienced by Samoa. The main market for taro is the large Polynesian community in New Zealand, although quantities are also shipped to the United States and Australia. Exports to New Zealand vary from full-scale commercial shipments from Fiji and Tonga, which are sent in refrigerated containers, to smaller non-commercial shipments to relatives, from Tonga and the Cooks. Taro is mainly shipped by sea, although some is air freighted from Nadi; there is also some air freighting of fresh cassava. Although there is now a relative shortage of taro for export markets that was not always the case. For a period during the 1980s both Tonga and Samoa were shipping excessive quantities at some times of the year, a practice which tended to reduce both average and total fob returns. This problem will be discussed further below. In common with other produce, roots and tubers also experience considerable quarantine problems, and this will also be discussed below.

In Fiji, farmers often sell taro to visiting traders, e.g. on the island of Taveuni, or take their taro to Suva for sale direct to traders. In the latter case, produce which is rejected as unsuitable for export is then sold at Suva market. The considerable competition for taro at the present time is causing problems on Taveuni (and elsewhere). Farmers have tended to make advance agreements with traders to sell their taro, only to sell to others at harvest time because the price offered is slightly higher. This is clearly not appreciated by the main companies on Taveuni who have been trying to establish a positive relationship with farmers, stressing the importance of improving quality. In Tonga, some advanced farmers have successfully established exports of small quantities of high quality roots and tubers to New Zealand and are working with neighbouring farmers to obtain quantities necessary to fill containers and reduce transport costs.

4.4 Horticultural produce

Export of horticultural produce is, at present, mainly from Fiji and Polynesia, although Vanuatu has plans to develop this industry. Exports from Papua New Guinea and the Solomons have been frustrated by production difficulties, logistical problems and quarantine requirements. The Cook Islands mainly exports fruit (papaya, mango, coconuts) to New Zealand. In the past it also exported significant quantities of citrus and pineapples. Tonga's main export is squash (Kaboucha pumpkin) to Japan, which has been considered a considerable success story, although it has not been without difficulties. It exploits a seasonal shortfall in the Japanese market in November when demand cannot be satisfied by domestic production and before supplies from New Zealand, Mexico or the USA are available. Exports were 7,000 tons in 1998, having been close to 12,000 tons in 1997. Tonga also exports fruit and vegetables to New Zealand. In the past, Tonga was a major supplier of water melons to New Zealand, but this more or less came to a halt after discovery in Auckland of a species of fruit fly in a consignment. Some exports still take place, with fumigation by Methyl Bromide. Samoa exports relatively small quantities of fruits and vegetables, having in the past concentrated on taro. Fiji presents perhaps the most dynamic example of horticultural development and has a considerable competitive advantage in terms of shipping links. It has established itself as a supplier of eggplant, papaya and mangoes to New Zealand and papaya and mangoes to Japan. Small quantities also go to Canada. Both Fiji and the Cooks are presently negotiating to gain entrance to the Australian market for their papaya.

The history of horticultural exports from the region has been one of ups and downs, and this is undoubtedly indicative of the problems faced. With the exception of crops produced for a particular "niche" period, such as squash and, earlier, water melons in Tonga, producers have often found it difficult to supply markets on a continuous basis. Markets have been developed in response to the opening of new air routes, only for airlines to change their schedules. Air freight is expensive and sometimes unavailable, although the situation has improved significantly in recent years with the introduction of larger planes, so that most flights now have surplus cargo capacity. Hurricanes and droughts have meant that produce could not be exported for a certain time, so jeopardising the goodwill built up with importers.

Perhaps the most important problem faced is that of the quarantine requirements of the importing countries, all of whom are themselves major agricultural producers. The withdrawal of previously acceptable treatment methods such as eythene dibromide meant that countries of the region had to look for alternative treatment methods. Heat treatment has emerged in recent years as an alternative approach and a system known as High Temperature Forced Air (HTFA) was developed at the University of Hawaii. While this was going on, research was conducted by scientists, principally from New Zealand, to establish the heat tolerance of the various species of fruit fly. HTFA facilities are now available in Fiji, Tonga and the Cooks (and New Caledonia) and on a trial basis in Samoa, where it is intended soon to introduce commercial facilities. One is also under consideration for PNG. However, so far, only papaya, mango, eggplant and breadfruit have been shown to withstand the treatment. Moreover, an HTFA chamber will not in itself guarantee market access, as it is necessary to satisfy importing countries that pests or diseases will not travel on any consignment. Bilateral Quarantine Agreements with importing countries detail the rules and requirements for trade between countries for each crop. Such agreements can necessitate the registering of growers and the requirement that they follow agreed cultivation practices. Progress made with New Zealand in agreeing on products which are not fruit fly hosts needs to be used as the basis for similar agreements with other countries. In this respect, exporting countries generally consider Australian quarantine regulations as unreasonable. Certainly, progress has been slow in reaching agreement with the Australian authorities.

Although the problems listed so far are not the fault of the countries of the South Pacific or their exporters, there are other problems which can be controlled. Failure to address some or all of these has contributed in no small way to the difficulties faced. As noted in the case of taro, limited market sizes in the importing countries can jeopardise returns if too much is exported. In 1994, Tongan farmers produced 3,000 tons more than the export quota for squash to Japan, leading to a 50 per cent fall in farm-gate prices and to many farmers failing to cover their costs for the season. The quota system had been established as a way of regulating the market, but quotas are now no longer applied. In the 1980s, Tonga was exporting over 20 containers of water melons to New Zealand every three weeks during the season, when around fifteen would have maximised total fob returns. Returns from papaya on the Auckland market can plummet if the Cooks and Fiji combine to send too many in one week. It is important to note here that while price information concerning export markets for fresh produce is relatively easily available, exporters do need to be able to relate market price to quantities supplied.

While some exporters are making determined efforts to improve the quality of exported produce, exporting of fresh produce remains a business which people can enter with limited experience or capital. It is unfortunately the case that the good work of a few exporters can be undone by the carelessness or unconcern of others. For example, good-quality packaging is expensive and some exporters have in the past been tempted to take short cuts by using second-hand packaging, although this is no longer permitted under the Bilateral Quarantine Agreements. Furthermore, horticultural produce must be of the highest quality and extremely fresh when exported. Bad harvesting and handling procedures can result in damaged fruit, which will be in extremely poor condition when it comes to be sold. In all countries consistent export quality has been identified as a major problem. The Cook Islands country report noted that the problem remains, despite numerous training programmes, seminars and workshops. In the Cooks until the late 1980s, the largest New Zealand company importing fresh produce (Turners & Growers Ltd.) had an export monopoly. The company had a full-time agent based in Rarotonga whose job was to facilitate exports and ensure the correct quality and the company provided a cold store at the airport. In Tonga in the 1980s the Commodities Board was responsible for more than half of fresh produce exports from the country. Considerable attention was paid to quality control and to developing a brand image. Fiji has also experienced difficulties. As a 1996 Asian Development Bank report has noted, “quality and continuity of supply…..are the hallmarks of success…………meeting the…demands of the market has been more of a problem for Fiji's exporters than identifying markets." These problems cannot be stressed too strongly. Export standards which were acceptable two decades ago are no longer acceptable. In all countries there is a case for the industry to try to police itself, as is beginning to happen in Fiji with the establishment of industry councils. In other words, reliable exporters need to work together to ensure that their efforts are not undermined by others.

4.5 Kava

Kava (yaqona) is grown in Tonga, Samoa, Fiji and Vanuatu. The root has long been grown for the traditional beverage market, with small quantities being exported out of the region, but recent years have seen a rapid increase in production in response to a growing pharmaceutical market (tranquillizer treatment for anxiety and stress) in the United States, Germany and France. Particularly noticeable has been the expansion in Fiji and Vanuatu. In Fiji exports increased from 280 tons in 1996 to over 400 in the first six months of 1998. In Vanuatu, where there are now an estimated 5,000 hectares, exports doubled in 1997 to 124 tons and tripled to over 400 tons in 1998. In Vanuatu VCMB has the sole export rights. It licenses exporters but retains quality-control functions. Throughout the region, a result of the rapid expansion of plantings is that a shortage of planting material is now being noted.

Prices for kava have been very high in recent years and the region's farmers have undoubtedly done well. Whether this situation will continue is open to some doubt. Other countries, such as Mexico and Hawaii, are beginning to plant the crop and this could have a significant impact on world prices unless it is accompanied by an increase in demand. Also, there have been recent reports of complaints by buyers regarding the quality of some kava supplied from the region. Again, it must be noted that poor quality control could jeopardise a very viable industry.

Domestic Marketing
Sigatoka market, Fiji.

4.6 Vanilla

Vanilla is grown in Tonga on the island of Vava'u and to a limited extent in Vanuatu. There are also some plantings in Samoa and Fiji, and Papua New Guinea also experimented with the crop many years ago. In recent years the industry in Tonga has been affected by competition from other producers, resulting in lower prices, processing difficulties, and the competing claims of crops such as kava.

4.7 Animal Products

In value terms beef is Vanuatu's second most important export, after copra. Export beef is almost entirely raised on mainly expatriate-owned plantations on Santo and Efate. The animals are exported as chilled carcasses and the main market is Japan. Apart from these exports and the previously noted exports from Samoa to American Samoa there are only insignificant exports of animal products from the seven countries under review.

4.8 Other Products and Further Diversification

Papua New Guinea exports relatively small quantities of rubber, pyrethrum, chillies and cardamom. With the exception of rubber, production tends to fluctuate significantly, depending on market prices and on prices of other crops which compete for the farmer's time, such as coffee. Fiji and Samoa export ginger and Vanuatu has, as noted, significant plantings of ginger although it has made few exports to date. An important export from the Cook Islands is maire, leaves, which are produced on Mauke Island and are woven to be used in Hawaii as "leis" for tourists. The Cook Islands, Samoa and Tonga now export Nonu fruit in varying forms. The fruit has for a long time been considered in the region to have medicinal properties. Exports began from Tahiti but other countries have become involved, as Tahiti has been unable to satisfy demand. Tonga has also been exporting seaweed on a trial basis.

With regard to further diversification, Samoa has plans to export cut flowers to New Zealand, Australia and Hawaii. Several countries are looking towards the possibility of supplying new "niche" markets, particularly of so-called "organic" produce. PNG already exports roasted organic coffee and also has a successful exporter of organic pineapple juice and pulp. Samoa supplies organic bananas of the lady finger type to New Zealand, although quarantine difficulties have been faced. Several points need to be noted with regard to organic exports. Firstly, organic markets are not presently very large. Oversupply can result in a collapse of prices and the entry of a new, more competitive producer can mean the end of the market altogether. Secondly, entering organic markets is not easy. The term "organic" does not simply mean the absence of pesticides and fertilizers but refers to the whole production process, which must be certified. Farmers cannot simply stop following conventional practices which involve the use of inputs, and start growing organic products as there must be a 2-3 year period for chemical residues to be "purged". In most cases companies seeking to sell "organic" products in developed countries must hire a certification organization to annually inspect the farms and pack houses. This can cost up to five per cent of the sales value. Finally, although there are specialised agencies dealing with organic foods, reliable market information can be difficult to obtain. Organic products are rarely sold through wholesale markets or auction houses which, for other, non-organic products, can be used to provide a clear indication of likely returns.

Importers in New Zealand advise that there is scope for the South Pacific to diversify into specific niche markets by, for example, marketing varieties which are specific to the region, carefully timing production to hit low seasons in importing countries (as does the Tongan squash industry), supplying Pacific islanders with a wider range of island produce (e.g. there are limited exports of breadfruit at present), by exporting fruits that are not fruit fly hosts and by exporting fruit fly host fruit to New Zealand to New Zealand during the "winter window" when HTFA treatment is not required under the Bilateral Quarantine Agreements.

5 Opportunities and Threats

The future offers a number of opportunities for the expansion of agricultural production, both for the domestic market and for export. At the same time, there remain considerable clouds on the horizon.

It is probably the case that for a long time South Pacific currencies were overvalued. However, recently most currencies have witnessed falls. This offers up the possibility for domestic producers to compete with imports, which will now become more expensive in local currency terms. Offsetting that, however, is the fact that export revenue, expressed in local currencies, will rise. In countries where there is both a local and export market for a product, e.g. taro, farmers may expect higher prices on local markets, in order that they match those achieved from exports. This, in turn, could reduce domestic consumption and encourage imports of, say, rice.

As indicated throughout this paper, the lack of markets is generally not so much a problem as the ability to supply them on a continuous basis. There are frequent, although changing, market opportunities, as evidenced most recently by the rapid expansion in demand for kava. However, a common complaint about South Pacific farmers is that they are generally content to earn a basic living but are rarely willing to go beyond that to make the necessary investments to increase their earnings. Stories are common of farmers who plant a crop, sell it for a good price and then give up, rather than replant. Clearly there are social and cultural influences on such farmer decisions, and this must be regarded as a threat to the development of sustainable production for domestic and export markets.

The development of HTFA facilities and the conclusion of Bilateral Quarantine Agreements gives farmers in the Pacific the opportunity to redevelop markets, particularly in New Zealand, that were lost as a result of quarantine problems. However, there always remains the threat that problems may be encountered in implementing the quarantine agreements to the satisfaction of both parties. A further threat is that Island producers will increasingly face competition from outside the region. Of immediate concern must be developments in Queensland, where farmers are seeking to supply New Zealand with many of the crops, which the South Pacific does or could supply. Papaya is one example. Developments in the retailing sector in New Zealand should also cause some concern for horticultural exporters. New Zealand still sees a high proportion of its fresh produce sales going through small independent shops but the country can be expected to fall into line with trends in the rest of the world which have seen supermarkets take an increasing share of produce sales. The threat here is that supermarkets buy on contract and expect regular and reliable supplies. As previously noted, producers in the region often have problems in meeting requirements for continuity; such production patterns fit more comfortably with ad hoc supplies to auctioneers than contracted supplies to supermarkets.

The Uruguay Round Agreement (URA) will probably have a relatively insignificant impact on the region's exports, although Fiji is concerned to ensure that its preferential access to EU sugar markets is maintained. Countries will, however, have to upgrade food control standards, particularly with regard to export inspection. The URA could, depending on the stance adopted by national negotiators, be a threat to industries which compete with imports. For example, neither the established Fijian rice industry nor the embryonic rice industries of PNG and the Solomons could survive external competition without tariff protection. There may be implications for PNG's sugar industry and for local dairy and meat industries. In the latter case, though, there is a compensating "opportunity" in that the WTO will lead to subsidy reduction on milk, thus tending to slightly increase world market prices and make domestically produced milk more attractive. Much further work is required by South Pacific countries to ensure that subsequent negotiations result in appropriate trade liberalization, while securing government objectives of food security and employment generation.

Although collaboration within the region is something that is constantly under discussion, the lack of progress in this area can be considered to represent a threat to export development. For example, as noted above, excessive supplies to one market can erode returns. However, collaboration to avoid this has not been achieved. The lack of cooperation gives rise to the so-called "Me-too" phenomenon, where the success of one country in a particular market encourages others to move into the same area, so leading to oversupply. There may be scope in the long run for joint marketing of Islands' produce to New Zealand and Australia using a Pacific Islands brand, if some of the obstacles to collaboration can be overcome.

Domestic Marketing

Kava market stand, Lautoka, Fiji.

6 Institutions Responsible for Marketing Development

As well as the various marketing boards that continue to exist and have already been discussed, there is a range of other institutions responsible for industry development, including marketing aspects. Fiji has established industry boards or councils for nearly all significant crops. In addition to the Sugar Board, which carries out sugar marketing, and the Coconut Board, which carries out industry development and quality control, there are industry councils for ginger, fruits and vegetables, root crops and kava and industry boards for dairy and meat. The Boards play a direct role in the industry; for instance the Meat Board manages two abattoirs and a tannery, whereas the Industry Councils mainly provide forums for those involved in the industry, such as growers, processors, exporters and officials, to discuss problems and make recommendations to the Government. While representing an interesting development, these Councils have been criticised by some as being “top-down” organizations. Moreover, while some are functioning well, others have had difficulties in making a significant impact.

Also in Fiji, a special unit of the Ministry of Agriculture, called Fiji AgTrade, has been established to promote export development as well as domestic marketing. Tonga has established Tonga Trade, which is presently attached to the Ministry of Commerce, but may be privatised. In October 1997, the Cook Islands set up an Agriculture Marketing Advisory Committee with responsibilities to hold discussions with all interested parties to come up with recommendations to address weaknesses in the export sector, as well as to identify overseas markets. The Committee’s members include representatives of airlines, shipping companies and growers. It has already managed to negotiate a 20 per cent reduction in air freight rates. One of the problems in some countries is the lack of coordination between agencies responsible for promoting trade and those responsible for supporting production and domestic agricultural marketing. Unless strong linkages can be developed the region will continue to carry out trade-development studies without reference to production possibilities.

In Papua New Guinea, the Fresh Produce Development Company (FPDC) was set up by the Government with funding from the New Zealand Government. It has sole responsibility for the promotion and development of horticulture crops, including information dissemination, extension and post-harvest handling improvement. Most of the activities of the Department of Agriculture in these areas have been transferred to the Company. PNG’s coffee and cocoa industries, although almost entirely in the hands of the private sector, are nevertheless monitored and controlled by Industry Boards, which are also responsible for information dissemination and overseas promotion. The Boards are responsible for establishing regulations to govern the industries and for inspecting factories and processing facilities to ensure they reach necessary standards. In the Solomons it is intended that CEMA and the Livestock Development Authority, although presently trading bodies, should gradually come to function more as regulatory bodies, responsible for policy matters, quality control, licensing, market intelligence and research and development. There are similar plans for the VCMB in Vanuatu.

Export Marketing Commodities

Colocasia taro at Otara Market, South Auckland, New Zealand.

7 Marketing Extension and Training

If farmers are to profitably supply good-quality produce to domestic markets and for export they need to know what products are in demand and when, how to grow, harvest and pack the produce and who to sell it to. The traditional way of transmitting information to farmers is by extension services but these have tended to pay little attention to marketing issues. However, increasingly in the region, Ministry of Agriculture extension services are being supplanted by services offered by specialised agencies and by the private sector and these usually give greater priority to marketing matters.

In the Cook Islands the extension service was abolished as a Division in January 1998 and merged with the Research Division. Following the very heavy reduction of the Ministry's payroll, this Division now has just twelve staff. No staff member is officially responsible for marketing matters and it is considered unlikely that the Ministry will be involved with marketing extension in the near future, although it does provide some indirect post-harvest and quality training through implementation of strict export standards for fresh produce.

In Samoa, a UNDP/FAO Horticultural Development project advocated that extension workers should be trained in marketing and post-harvest matters. However, the Department of Agriculture considered at the time that their employees could not take on additional responsibilities, in light of the fact that they were already required to cover agriculture, forestry and fisheries. The Department has recently established the Integrated Extension System (IES) which aims primarily at assisting subsistence or semi-subsistence farmers to make the transition to a more commercial outlook.

In Fiji, MAFF has a Commodity Development and Marketing Unit (CD&M) which is responsible for marketing matters. Most extension workers have received little or no training in marketing and where workshops and other training activities include marketing components the CD&M staff act as resource persons. There are presently proposals for an FAO project, which would, *inter alia*, upgrade extension workers' skills in marketing and post-harvest matters. As noted earlier, some exporters have been working with farmers to ensure that they are aware of quality requirements for export. Such initiatives are, however, jeopardised by other traders who buy from the farmers, having incurred no costs in assisting them during the production period. Vanuatu is presently implementing an FAO TCP project to introduce a market information service and this is being accompanied by a training programme for extension workers to assist them to interpret price information and to advise on post-harvest issues. Up until now, the agricultural field assistants have been mainly involved with quality control of cash crops and no previous training had been carried out on marketing. The extent to which recent cut backs in the Dept. of Agriculture will affect the extension service is presently unclear. Under this project farmers are also being trained, through the medium of theatre performances staged at Port Vila market.

In the Solomons, farmers are generally aware of quality and marketing requirements for copra and cocoa although quality problems nevertheless continue to be faced. CEMA will soon be appointing Rural Development Officers to work with copra, cocoa and spice farmers. These are mainly former extension officers from the Ministry of Agriculture. With food crops, farmers have little knowledge of market requirements. Extension workers have received no training in marketing. In Papua New Guinea, Government extension services are poorly informed about marketing although in the past those in remote areas were responsible for buying some crops from farmers, a practice which continues in a small way in some provinces. As noted, horticulture extension is provided by the Fresh Produce Development Company and marketing extension for commodities is available through the Cocoa and Coconut Extension Agency and the Coffee Development Agency, as well as the Oil Palm Industry Corporation.

Export Marketing Commodities

Alocasia taro and fresh coconuts at Otara Market, South Auckland, New Zealand.

8 Conclusions and Recommendations[9]

Farmers are becoming more market oriented in supplying domestic markets for roots and tubers, horticultural produce and other foods. However, it is widely recognised that production remains a major constraint. Supplies are inadequate, prices are high and production tends to be seasonal. Nevertheless, productivity could be improved within existing farming systems and governments and non-governmental agencies could assist farmers to increase the supply of local produce for domestic markets, and the increasingly important tourism market, in a number of ways, including:

- by making available the necessary technical knowledge regarding existing and new crop production and out-of-season cultivation;
- by encouraging the private sector to stock the right varieties of seeds, planting material and other supplies;
- by improving extension in production, post-harvest handling and marketing and by involving the private sector in training wherever possible;
- by working directly with commercial farmers, traders and others to promote improved farming techniques.

It is important that governments and others remain fully aware of the social, cultural and nutritional constraints to a greater market orientation, and bear these in mind when planning production and marketing development activities. It is also important that governments ensure a realistic allocation of resources between domestic and export production support, giving prime emphasis to food crop production and the food security needs of the Pacific Island Countries.

Good quality market infrastructure can play an important role in promoting efficient marketing of domestically produced crops, and markets can often act as focal points for local communities. Governments and, more importantly, municipalities, need to be aware of this and ensure that urban and rural markets are adequate and are planned in association with the market users and that revenue raised from market fees is reinvested into market development, maintenance and improvement. The upgrading of transport infrastructure is also vital. It is recommended that governments seriously re-examine the merits of subsidising export producers during periods of low world prices and compare the impact of such subsidies with the alternative of spending the available funds on infrastructure and other developments.

The benefits of providing farmers with timely market information regarding both domestic and export markets can be considerable. Information provided should cover matters such as price, supply, demand, production prospects and economic returns and should preferably be disseminated by radio. Moreover, it is not just sufficient to provide information. Farmers, through extension services and other channels, must be assisted to interpret that information in order to make informed marketing and planting decisions.

In this connection, marketing can be considered a legitimate extension function. Where possible government extension services should establish marketing extension units. At the same time, new approaches to extension need to be explored, such as the provision of extension by industry organizations and by the private sector. Training in marketing at all levels is essential. Topics to be covered for farmers, traders, extension workers, market managers and exporters should include post-harvest handling, pest and disease management and business management.

There is a need for improved communication between those involved in marketing and governments in order to facilitate a greater partnership between government and the private sector. The further development of farmers', traders' and exporters' associations is highly recommended. Examples of such associations include the Samoan Farmers' Federation, the Pau Pau Growers' Association in the Cooks and market vendors' associations in Suva and Lautoka.

Greater cooperation on export marketing is desirable, both within countries and between countries. Initially, it is vital that all outstanding quarantine issues be resolved and this should ideally be approached on a regional basis, under the umbrella of relevant regional agencies. In the long run, there may be scope for collaboration between countries, in order to supply the major export markets. Indeed, it has to be recognised that export markets for agricultural produce are growing increasingly competitive. To ensure that the South Pacific survives in this competitive environment governments are recommended to:

- make efforts to improve the quality of agricultural produce exported from the region, both for traditional and non-traditional export crops, through improved extension, industry regulation, primary processing support and export inspection;
- avoid a common cause of confusion by separating their quarantine organizations from their quality-control organizations;
- ensure that crops recommended for development or expansion can conveniently fit into the cultural and farming systems of their countries;
- ensure that farmers and traders are fully aware of the requirements of the markets in terms of quality, quantity, continuity, packaging, labelling, etc.
- ensure that they are able to make available support services such as plant protection and, in the case of organic farming, facilitate necessary certification;

- rapidly establish Bilateral Quarantine Agreements with relevant countries;
- in association with relevant regional agencies, develop updated lists of pests and diseases for each country;
- promote the acceptance by other countries of the “non-host” quarantine protocols of the type agreed with New Zealand;
- in association with relevant agencies further explore the possibilities for production for niche and off-season markets;
- facilitate improved coordination between relevant ministries; and
- improve technical knowledge of handling and shipping.

Marketing Extension and Training

Agriculture Marketing Officer visits Tanna roadside market, Vanuatu.