

Economic Change and Dietary Consequences Among the Tahitians

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The romantic image of the Tahitian living from the fruits of the land and the sea is dated. No Tahitian lives solely on the fish he catches, the breadfruit he collects, or the taro he cultivates. In fact, some Tahitians use imported foods more than traditional foods, and all eat some imported foods. The new diet patterns result from changing modes of livelihood. As Tahitians intensify cash-crop production or take up full-time wage labor, subsistence farming and fishing declines. Any local commercial food-crop production or fishing is but slightly developed. Consequently, traditional foods may not even be sold in every region of the Society Islands, or, when available, may be more expensive than imported foods. The Tahitian consumer therefore turns to the cheaper and easier to obtain imported foods. A growing dependence on imported foods is a direct result of economic change in Tahitian life.

Many Europeans believe that Tahitians purchase such imported foods as bread, rice, or canned sardines rather than fresh fish, taro, sweet potatoes, or other traditional foods because of a taste preference. Tahitians do enjoy fresh bread and coffee in the morning, and do like the convenience of opening a can of sardines, but generally the Tahitians think traditional foods taste better. Despite their stated preferences, Tahitians do not hesitate to abandon subsistence farming and fishing when given an opportunity for wage labor or intensified cash-crop production. Once they have stopped growing, collecting or catching their own food, they further disregard their taste preferences and use cash income for the foods that are cheapest and easiest to obtain—ordinarily imported foods. Diet changes among the Tahitians follow from rational economic choices.

The trend dietary change among the Tahitians of French Polynesia is duplicated in many other island territories of the Pacific. Nutritionists warn of the dangers of this trend because imported foods, particularly the popular foods, bread and rice, usually lack important nutritional elements found in the island foods they replace (Jacquier, 1949: 603-605; Mckee, 1957: 15-19). To reverse or modify this trend numerous measures have been proposed. The return to subsistence farming and fishing, the education of consumers about the nutritional values of different foods, and the improvement of local commercial food production are frequently proposed measures. Since these inevitably involve an element of economic choice by the islanders, a knowledge of the economic background of dietary change is necessary to select and implement effectively the correct measures. The following data on economic change and dietary consequences in Aoua and Maiao,¹ two Tahitian communities studied in 1961-1962,² provides such

¹ With glottal stops marked: 'A'ou'a and Mai'ao.

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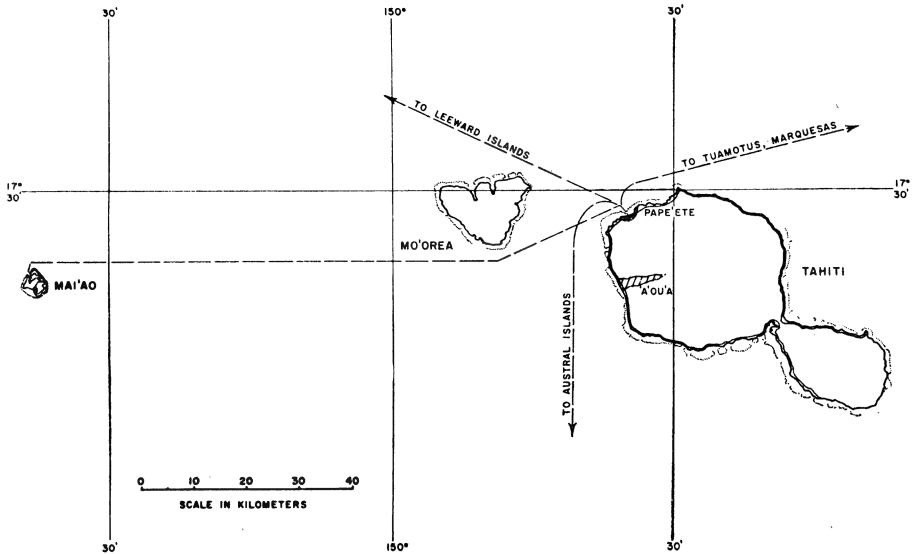


Fig. 1.

a background for Tahiti and nearby islands.

Maiao, (see map, fig. 1) a small island 105 kilometers west of Tahiti, combines the physical characteristics of both a high island and a low island: it consists of a weathered mountain ridge of volcanic origin encircled by low coral flats containing two shallow lakes, all of which is surrounded by an outer lagoon and barrier reef. The 217 Tahitian inhabitants of Maiao earn their livelihood by mixed subsistence and cash-crop (mainly copra) production. Maiao is linked to the port of Papeete on Tahiti by irregular visits of trading launches, which anchor offshore to take on and discharge cargo. As the two passages in the Maiao reef cannot be navigated safely, whale boats and outrigger canoes lighten the cargo to and from the island. Aoua (see map, fig. 1) is a wedge-shaped section of southwest Tahiti which consists of a narrow valley, a portion of the coastal plain, with the lagoon and offshore reef forming the outer boundary. Most of the some 430 Tahitians of Aoua (some Europeans and Chinese also live there) now earn their livelihood by wage labor, some of them commuting to Papeete only 20 kilometers distant by paved road.

The Maiao are semi-dependent on imported foods because of recent intensification of cash-crop production. But the Aoua, who have recently changed from mixed subsistence and cash-crop production to wage labor, surpass the Maiao in reliance on imported foods. Economic change and dietary consequences in each community are discussed below on two levels. First, detailed data on relative consumption of imported and traditional foods are presented. Second, a history of recent economic change in each community is given with a discussion of crucial choices leading to diet changes.

Maiao: Contemporary Diet Patterns

There would appear to be little need for imported food on Maiao.³ The central mountain slope has fertile soil for a variety of crops in amounts to feed the small population. The lagoon, coral reef and ocean waters surrounding Maiao offer an abundance of sea life. Yet the Maiao import many foods because they prefer to spend their time making copra or other cash products, rather than producing all their own food. Consequently their diet contains a mixture of local and imported foods. Rice, homemade bread, biscuits and other flour products are now essential to their diet, having largely replaced manioc, sweet potatoes, taro and yams. Coffee (most of which comes from Tahiti or Moorea) and tea are taken regularly, liberally sweetened with imported sugar, also used frequently in cooking. Some canned meats and fish are imported, although local fish, shellfish, lobsters and crabs still provide most of the protein eaten by the Maiao. The

Table 1. Frequency of Food Item Consumption Expressed in Meal-Units (see text for definition). October 30-November 5, 1961

Food Item	Morning	Evening	Total
Total Possible Meal-Units	1196	1133	2329
A. Imported Starchy Foods			
1. Flour Products	892	440	1332
2. Rice	161	54	215
Total	1053	494	1547
B. Local Starchy Foods			
1. Breadfruit	133	747	880
2. Manioc	68	115	183
3. Banana	43	217	260
Total	244	1079	1323
C. Imported Animal Foods			
1. Canned Meat	25	51	76
2. Canned Fish	—	4	4
Total	25	55	80
D. Local Animal Foods			
1. Fish	345	1008	1353
2. Shellfish	150	72	222
3. Crustacea (Crabs & Lobsters)	3	7	10
4. Pork	—	12	12
Total	498	1102	1597
E. Imported Beverage			
1. Coffee	901	162	1063
2. Tea	22	39	61
F. Local Coffee	195	23	218
G. Imported Sugar	1196	289	1485
H. Local Coconut Sauce	1174	1061	2235
I. Other Imported Foods	98	67	165
J. Other Local Foods	9	55	64

³ See P. Verin (1962: 3-16) for a geographic and ethnographic description of Maiao.

only local vegetable foods still important in their diet are breadfruit, coconuts (used in making sauces) and bananas.

The Maiao eat only twice a day, once in the morning before going to work, and again in the late afternoon upon returning from copra making or fishing. The morning meal ordinarily consists of coffee or tea, with sugar and coconut creme added, accompanied with biscuits, homemade bread or some other flour product. Rarely are traditional foods prepared for this meal, although occasionally foods left over from the previous meal may be eaten in the morning. The evening meal is the main meal of the day, and is still basically traditional, even though imported foods are consumed then. Fish from the lagoon or sea is usually the main protein food, and breadfruit is usually the main starchy food.⁴ When breadfruit is not in season bread or rice may be substituted, and occasionally—if the weather is poor or there is little time for fishing—canned meat or canned fish may be substituted for fresh fish.

Table 2. Frequency of Food Item Consumption Expressed in
Per Cent Food Items Consumed per Total Meal-Units.
All Meals October 30-November 5, 1961

Food Item	Per Cent
A. Imported Starchy Foods	
1. Flour Products	57.2%
2. Rice	9.2
Total	66.4
B. Local Starchy Foods	
1. Breadfruit	37.8
2. Manioc	7.9
3. Banana	11.2
Total	56.8
C. Imported Animal Foods	
1. Canned Beef	3.2
2. Canned Fish	.2
Total	3.4
D. Local Animal Foods	
1. Fish	58.1
2. Shellfish	9.5
3. Crustacea	.4
4. Pork	.5
Total	68.5
E. Imported Beverage	
1. Coffee	45.6
2. Tea	2.6
F. Local Coffee	9.8
G. Imported Sugar	63.8
H. Local Coconut Sauce	96.7
I. Other Imported Foods	3.5
J. Other Local Foods	2.7

⁴ For a description of traditional Tahitian foods and their preparation see S. Malcolm and E. Massal (1955: 6-9).

To measure the relative importance of traditional and imported foods in the Maiao diet I surveyed all meals eaten in 30 of the 36 Maiao households from October 30 to November 5, 1961. The survey technique is that used in New Guinea by Belshaw (1957: 88-94; 100-101). Each household is visited at mealtime, or close to it, and all foods consumed and the number of people eating is recorded. Each meal is given a value called a 'Meal-Unit,' which corresponds to the number of adults and children (but not infants) partaking in the meal. Each food item consumed is recorded accordingly. A dinner of a family of six would be recorded as '6 Meal-Units,' and each food item would be recorded as '6' units. This technique is primarily designed to indicate food preferences and not quantities of food consumed.

Table 1 summarizes the frequency of consumption of each food item recorded in the survey. The main food items are grouped into 'starchy' and 'animal,' a classification which follows the Tahitian distinction between *ma'a* and *'ina'i*. In addition, food items are classed as 'local' or 'imported.' Beverages, sugar, coconut sauce and miscellaneous items are also listed. From this table it can be seen that imported starchy foods—biscuits, flour products and rice—are consumed more frequently than local starchy foods. If this survey had been taken in January instead of October it would show an even heavier reliance on imported starchy foods because breadfruit, the most important local starchy food, is not in season then. The table also indicates that local protein foods are still more important than imported protein foods. In Table 2 these results are shown in terms of the relative frequency of consumption, calculated as the percentage each food item is eaten for all possible meals.

Virtually all the local foods the Maiao consume are products of household fishing or farming, or are gifts from other households. Seldom are local foods sold on Maiao. Imported foods are obtained by: 1) purchase in Papeete during a trip to Tahiti; 2) purchase from trading vessels visiting Maiao; 3) purchase from one of several small stores, owned and operated by Maiao people, that sell flour, biscuits, rice, sugar and limited amounts of canned food. From another survey of food costs, I estimate that the Maiao spend about 2200 *Franc Pacifique* (FCP) per capita per annum on imported foods, which equals about 24 % of the approximately 9300 FCP per annum cash income of the Maiao. (Eighty-nine FCP equals \$ 1.00 U. S.)

Maiao: Recent Economic Changes

Until the mid-1950's the Maiao worked only part-time at cash-crop production. Copra, their main crop, was produced for about six months of the year. Only about 40 tons (40,000 kilograms) per annum were exported. In contrast, subsistence farming and fishing were virtually full-time occupations. Locally-grown manioc, sweet potatoes, taro, yams, bananas and bread-fruit, along with fish, shellfish and crustacea from the lagoon or sea were staples. Imported foods were luxury items reserved for special occasions. They were always in short supply because of Maiao's small cash income, and the infrequency of boat service to the island. Supplies of imported food would often be exhausted in the three or four months which frequently passed between visits of trading boats.

An accident of geography kept Maiao commercially 'underdeveloped' long after other islands more distant from the commercial center of Papeete had become thoroughly involved in cash-crop production and trade. Although the peaks of of Tahiti can be seen from Maiao, because the island did not lie on any major trade route (See Map 1) trading vessels seldom called there. Only occasionally did small cutters or trading launches make a special trip to Maiao.

In the mid-1950's the trade situation began to improve. Increased competition for copra among traders brought them more frequently to Maiao in search of cargo. The Maiao welcomed this opportunity to trade more regularly. They responded with an increase in copra production, which doubled in a few years, reaching about 150 tons per annum in 1962, almost four times the 1952 total. In addition, a growing demand in Tahiti for fish from the Maiao lagoon, and for pandanus roofing thatch (*rauoro*), has led to a profitable local trade in these commodities.

By 1961 the Maiao were spending about four times as many hours on the production of cash products than on subsistence farming and fishing. In effect, they had become full-time cash-crop producers, and only part-time subsistence producers, the reverse of their former position. Such a radical economic change required a number of crucial decisions by the Maiao.

The first involved putting copra production on a year-around basis. Prior to 1955, and for as long as anyone can remember, copra production on Maiao was regulated by a *rahui* system. Under this system everyone made copra at the same time, and after the copra harvest was shipped to Papeete, all copra production was prohibited for a specified period—usually three or four months—which extended until just before the next boat was expected. At the end of the period the prohibition, or *rahui*, was rescinded and the people were free to make copra for shipment on the next boat. The *rahui* system was necessary, it was thought, to prevent the theft of coconuts likely to occur if people were allowed to make copra at any time during the several months between boats. The coconut plantations are located far from the village area, and people were unable to watch their plantations at all times, so this system protected their coconuts until harvest time, when the *rahui* was rescinded.⁵

While the *rahui* system might have been of some value when trading vessels infrequently visited Maiao, by the mid-1950's, when traders visited Maiao more often, the system impeded copra production. Coconuts were wasted during the *rahui* period, either from rotting, taking root, or being eaten by rats. Since it was difficult to estimate a boat's arrival (a radio transmitter-receiver was not installed until 1957) when a boat arrived the *rahui* might still be in effect and consequently no copra would be available. Aware of the inefficiency of the situation, the chief of Maiao abolished it in 1955 to allow unrestricted copra production. A few older men opposed this abolition on the grounds that the *rahui* was an 'ancestral custom' (*peu tupuna*) but most of the younger men supported the move. All now agree that it was sensible.

At the time the *rahui* system was abolished the Maiao still produced most of

⁵ Danielsson (1956: 144-147) and Barrau (1959: 153) have described a similar *rahui* system for the Tuamotu Atolls. There, however, the atolls are divided into sectors and each sector is worked in turn, with all other sectors being under a *rahui* to prevent coconut thefts.

the starchy foods they consumed. Every household had a manioc plantation on the mountain slopes, and usually also cultivated taro, sweet potatoes and yams. With more frequent boat service, and the abolition of the *rahui* system, the Maiao faced the choice of continuing full-time subsistence farming, or reducing subsistence farming in order to have time to expand copra production. All chose the latter alternative and now only small amounts of root crops are cultivated. The men preferred to increase their cash income by expanding copra production, despite the realization that they would have to start depending on imported foods. Their logic was simple: they reasoned that making copra was 'light work' (*'ohiipa mama*) compared to the 'heavy work' (*'ohiipa toiaha*) of cultivating root crops, and that with the cash income from copra they could purchase sufficient imported foods to offset the loss of local foods, and still have cash left for other consumer goods.

The Maiao also recognized that by giving up farming they would eliminate a chronic source of community strife. Formerly, the Maiao were often involved in disputes with one another concerning pig depredations in root crop plantations, because the pigs, which were seldom fenced or properly fed, often broke into the plantations to forage. In fact, many people told me that the main reason they abandoned cultivation was that they wished to avoid the inevitable trouble that followed when someone else's pigs broke into their plantations.

While root crops have been virtually eliminated from the Maiao diet, the recent economic changes have only partially reduced the consumption of the tree crops breadfruit, coconut and banana. Coconut creme is used everyday in coffee, and in saucés for fish and other seafoods. Bananas are eaten irregularly throughout the year, and bread-fruit is a favorite food for the approximately six months of the year it is in season. Economic change has not greatly affected the production and consumption of these traditional foods because, unlike root crops, they require very little care beyond the initial planting and the periodic harvesting. This is particularly true of the breadfruit trees and coconut palms which may bear for forty years or more after planting and require little effort in harvesting.

Fish and other sea foods are also still important in the Maiao diet. The Maiao have chosen to continue subsistence fishing, and not subsistence farming, for a number of reasons. First, canned meat and canned fish are relatively expensive substitutes for local sea foods, especially when compared to the cheapness of rice and flour as substitutes for root crops. Second, whereas the Maiao do not like the work involved in cultivating root crops, they enjoy fishing. It is more sport than work to them. Finally, fish are plentiful and easily caught on Maiao so that little time need be expended in fishing.

Intensified copra production has, however, led to some changes in fishing practices. Formerly adult men might spend much time fishing in the lagoon, or out at sea, for the larger and better tasting fish. Now as most adult men are busy making copra they have little time for their time-consuming traditional fishing techniques such as trolling for bonito (*hi te 'auhopu*) or deep-line fishing (*tu'u 'i raro*). Consequently, they now depend mostly on the smaller and less desirable lagoon fish which they take by hook and line, or by spearfishing. The latter method, in which imported diving masks and spear-guns are used, was introduced on Maiao in 1955 and is now the most popular fishing method because one man can usually spear enough fish in an hour or even less to feed his family.

Spearfishing is especially popular among the unmarried youths (*taure'are'a*) who are often charged with provisioning the family table with fish while their fathers are making copra.

Aoua: Contemporary Diet Patterns

The Aoua people live among a fertile stretch of the Tahitian coast with the lagoon and the sea at their doorsteps. Yet they purchase most of their food rather than produce it themselves because they prefer wage labor to making their livelihood by mixed subsistence and cash-crop production. They purchase more imported foods than traditional foods because imported foods are generally cheaper and are readily available. While most traditional foods must be bought at the Papeete market, imported foods are sold in neighborhood stores.

The Aoua follow the European pattern of eating three meals a day, with the

Table 3. Frequency of Food Item Consumption Expressed in Meal-Units. March 26-29, 1962.

Food Item	Morning	Midday	Evening	Total
Total Possible Meal-Units	495	383	489	1367
A. Purchased Starchy Foods				
1. Bread	483	59	453	995
2. Rice	—	66	77	143
3. Sweet Potato	—	83	12	95
4. Taro	—	29	19	48
5. Banana	—	11	—	11
6. Fe'i Banana	—	12	—	12
Total	483	260	561	1304
B. Local Starchy Foods				
1. Breadfruit	—	241	40	281
2. Banana	—	91	28	119
3. Sweet Potato	—	17	—	17
4. Fe'i Banana	—	9	11	20
Total	—	358	79	437
C. Purchased Animal Foods				
1. Fish	17	237	28	282
2. Canned Meat	30	86	4	120
3. Canned Fish	—	18	8	26
Total	47	341	40	428
D. Local Animal Foods				
1. Fish	—	145	37	182
E. Purchased Beverage				
1. Coffee	343	15	273	631
2. Tea	6	—	117	123
F. Local Coffee	144	—	66	180
G. Purchased Sugar	475	18	415	908
H. Purchased Butter	244	—	179	423
I. Local Coconut Sauce	386	226	307	919
J. Other Purchased Foods	109	64	72	245
K. Other Local Foods	29	14	19	62

largest at midday. The morning and evening meal are alike in content. Typically they consist of coffee, or tea, taken with sugar and coconut creme, and bread. Food remaining from the previous meal is sometimes eaten, and occasionally rice, some local starchy food, or fish may be prepared for the meal. The midday meal more often includes local foods than do the other two meals. Some days a typically Tahitian meal of fish, breadfruit, some starchy roots and coconut sauce, is prepared. But, ordinarily bread or rice, eaten with canned meat or canned fish, are the main ingredients.

A diet survey similar to the Maiao survey was undertaken in Aoua. Over 60 households were visited during 6 days, although not every household was visited on each day. The wealthier households of businessmen and administration employees were excluded from this survey which was designed to indicate diet patterns of ordinary wage laborers.

Table 4. Frequency of Food Item Consumption Expressed
in Meal-Units. July 24-25, 1962.

Food Item	Morning	Midday	Evening	Total
Total Possible Meal-Units	161	160	172	493
A. Purchased Starchy Foods				
1. Bread	161	44	161	366
2. Rice	—	42	6	48
3. Sweet Potato	—	24	12	36
4. Taro	—	7	—	7
5. Banana	—	6	—	6
6. Fe'i Banana	—	12	—	12
Total	161	135	179	475
B. Local Starchy Foods				
1. Breadfruit	—	44	—	44
2. Banana	—	6	—	6
3. Sweet Potato	—	7	—	7
4. Fe'i Banana	—	9	—	9
Total	—	66	—	66
C. Purchased Animal Foods				
1. Fish	6	56	6	68
2. Canned Meat	—	86	4	90
3. Canned Fish	6	18	—	24
Total	12	160	10	182
D. Local Animal Foods				
1. Fish	5	20	3	28
E. Purchased Beverage				
1. Coffee	93	—	89	182
2. Tea	5	—	51	56
F. Local Coffee				
	45	—	40	85
G. Purchased Sugar				
	158	—	167	325
H. Purchased Butter				
	77	—	45	116
I. Local Coconut Sauce				
	111	69	87	267
J. Other Purchased Foods				
	12	43	24	79
H. Other Local Foods				
	3	24	8	35

Because the Aoua still eat some traditional foods, seasonal variations, primarily of breadfruit and fish, are reflected in their diet choices. Fish is plentiful in Tahitian waters, and is relatively cheap at the Papeete market, during the period between September and May. The Aoua eat more local fish and more market fish during this period than during the rest of the year when fish is more scarce and expensive. Breadfruit is seasonal in Aoua as on Maiao. To indicate seasonal differences in food consumption, meal surveys were taken during two periods: 1) March 26 to March 29, 1962, when fish and breadfruit were plentiful; 2) July 24 and July 25, 1962, when fish and breadfruit were scarce. Table 3 indicates consumption during the former period, Table 4 during the latter period, and Table 5 summarizes the relative consumption of food items during both periods. (Note that the category 'Purchased Foods' in Tables 3, 4 and 5 includes both imported foods and local foods that are purchased.) The greater reliance of the Aoua than the Maiao on purchased foods is apparent in these tables, as is the

Table 5. Frequency of Food Item Consumption Expressed in Per Cent
Food Items Consumed per Total Meal-Units.

Food Item	March 26-29 All Meals	July 24-25 All Meals
A. Purchased Starchy Foods		
1. Bread	72.3%	74.2%
2. Rice	10.6	9.7
3. Sweet Potato	6.9	7.3
4. Taro	3.6	1.4
5. Banana	.8	1.2
6. Fe'i Banana	.9	2.4
Total	95.2	97.2
B. Local Starchy Foods		
1. Breadfruit	20.1	8.9
2. Banana	8.7	1.2
3. Sweet Potato	1.2	1.4
4. Fe'i Banana	1.5	1.8
Total	31.5	13.4
C. Purchased Animal Foods		
1. Fish	20.6	13.8
2. Canned Meat	8.8	18.3
3. Canned Fish	1.9	4.9
Total	31.3	37.0
D. Local Animal Foods		
1. Fish	13.3	5.7
E. Purchased Beverage		
1. Coffee	46.2	37.0
2. Tea	9.0	11.4
F. Local Coffee	13.2	17.2
G. Purchased Sugar	66.4	65.9
H. Purchased Butter	30.1	23.5
I. Coconut Sauce	67.2	54.2
J. Other Purchased Foods	17.6	16.0
K. Other Local Foods	4.5	7.1

dominance of imported foods over local purchased foods in all major categories except fish.

Most of the fresh fish that the Aoua buy comes from the central market on Papeete, not from fishermen in Aoua or nearby. Similarly, most of the taro, sweet potatoes and bananas the Aoua purchase comes from the Papeete market. Most of the imported food items, on the other hand, come from a large store located in Aoua. There is also a smaller store in Aoua, and several bread trucks from which the Aoua obtain imported foods. The place of purchase of all purchased items recorded in the survey is indicated in Table 6.

As part of the Aoua survey I recorded the price paid for all purchased items eaten in the meals surveyed. These data indicate that expenditures on imported food items—bread, canned meats, butter, sugar, etc.—account for about 65 % of the total amount spent on foods. The remaining 35 % is spent on the purchase of traditional foods like fresh fish, taro, sweet potatoes, etc. Table 7 records the cost of each item per Meal-Unit, and also the average cost of each item for all meals. From the latter figure an estimate of 6.5 FCP cost per Meal-Unit is derived. This represents the average cost of one meal for one person. The cost of three meals per day therefore averages 19.5 FCP or three times the Maiao average. The total yearly food expenditure would be about 7200 FCP per capita, which is approximately 31 % of the 23,000 FCP yearly per capita cash income of those surveyed.

Aoua: Recent Economic Changes

Fifteen years ago most Aoua depended primarily on local breadfruit, bananas

Table 6. Place of Purchase of Purchased Foods Expressed in Per Cent of Each Food Item per Total Possible Meal-Units.

All Meals March 26-29, July 24-25.

Place of Purchase:	Papeete		Aoua	
	Market	Stores	Stores	Local Producers
Food Item	%	%	%	%
A. Purchased Starchy Foods				
1. Bread	—	—	100	—
2. Rice	—	1	99	—
3. Sweet Potato	88	—	—	12
4. Taro	100	—	—	—
5. Banana	84	—	10	6
6. Fe'i Banana	44	—	—	56
B. Purchased Animal Foods				
1. Fish	94	—	—	6
2. Canned Beef	—	2	98	—
3. Canned Fish	—	—	100	—
C. Purchased Beverage				
1. Coffee	—	—	97	3
2. Tea	—	—	100	—
D. Purchased Sugar	—	8	92	—
E. Butter	—	—	100	—

(including the *fe'i* banana, *Musa troglodytarum L.*) coconuts, and root crops that they cultivated, and on sea foods from the adjacent lagoon and sea. At that time most of the Aoua were engaged in mixed subsistence and cash-crop production, and only a few men were wage laborers. Now, however, most Aoua live from wage labor. Almost 90 per cent of the men, and over 40 per cent of the women earn their living from regular wage labor. The Maiao therefore have little time to spend on subsistence activities, but have sufficient cash to purchase their own food.

Most Aoua welcomed the opportunity to abandon subsistence and cash-crop production, and to adopt wage labor as their principal mode of livelihood. In 1950 metropolitan investors opened a small factory in Aoua for processing grated coconut meat for export to France. Although at first the Aoua were not enthusiastic about regular factory work, in a few years the factory became a popular place to work. Ever since it has been the largest single employer of Aoua labor. Starting in the late 1950's many Aoua also obtained jobs outside their community because of increased government spending in Tahiti, and because of the expansion of the tourist industry. Now residents of Aoua

Table 7. Cost of Purchased Food Items Expressed in Franc Pacifique (FCP) per Meal-Unit. All Meals March 26-29, July 24-25.

Food Item	Cost per Meal-Unit at Meals Item Eaten		Average Cost for all Possible Meal-Units
	Traditional	Imported	
A. Purchased Starchy Foods			
1. Bread	—	2.0	
2. Rice	—	2.4	
3. Sweet Potato	3.4	—	
4. Taro	6.0	—	
5. Banana	3.5	—	
6. Fe'i Banana	4.2	—	
Total			2.2
B. Purchase Animal Foods			
1. Fish	5.6	—	
2. Canned Meat	—	8.2	
3. Canned Fish	—	5.5	
Total			2.1
C. Purchased Beverages			
1. Coffee	1.6	—	
2. Tea	—	.4	
Total			.7
D. Purchased Sugar	—	1.2	.7
E. Purchased Butter	—	1.1	.3
F. Other Purchased Foods	.4	1.9	.4
Total All Purchased Foods			6.5 FCP*

* 6.5 FCP represents the average approximate cost of one Meal-Unit, which is the equivalent of one meal eaten by one person. Three meals a day would then cost an average of 19.5 FCP per person. (19.5 FCP equals about \$.22 U.S.)

work as carpenters, masons, stevedores, waitresses, mechanics, maids, or clerks in neighboring districts or in Papeete.

As most of the Aoua have little land for copra and other cash crops, they welcome wage labor as an opportunity to increase their cash income. In addition, most prefer wages to cash earned from agricultural products, because wages are 'fast money' (*moni 'oi'oi*) that are paid by the day or week, while income from cash-crops is 'slow money' (*moni taere*) that comes in only at harvest time. The recently introduced French system of *allocations familiales* provides the Aoua with further incentive for turning to wage labor. Under this plan a laborer receives 400 FCP from the government each month for each dependent child. This means that a laborer with five children who earns 5,000 FCP per month can receive almost half a gain as much through these 'family allocations.' Because these payments go only to the regularly-employed, and not to self-employed farmers or fishermen, the Aoua feel that they are in effect penalized if they do not take up wage labor.

The Aoua realize that this economic change has caused a shift in diet from 'native food' (*ma'a mao'hi*) to 'European food' (*ma'a po'pa'a*). Most of the Aoua consider this to be a change for the worse because, except perhaps for fresh bread, coffee and sugar, they generally prefer their traditional foods. But as wage laborers they have little time for farming or fishing, and must therefore purchase traditional foods if they wish to eat them regularly. However, as Tables 3, 4 and 5 indicate, they purchase little traditional food. They simply consider that traditional foods are too expensive and difficult to obtain for regular consumption.

Imported foods are more often purchased by the Aoua because of cheapness and convenience. In some food categories the price difference is considerable. Bread and rice, which the Aoua use as substitutes for breadfruit, sweet potatoes and taro, cost about half as much as those traditional foods (see Table 7). Even canned meat and canned fish may at certain times of the year be less expensive than fresh fish from the Papeete market, particularly if one calculates the additional cost of going to the market.

The relative convenience of purchasing imported foods and the inconvenience of purchasing traditional foods reflects two different types of food distribution systems. Imported foods are ordinarily handled by storekeepers, mostly Chinese, who have stores in rural areas as well as in Papeete. In Aoua there is one large Chinese store, a smaller store operated by a Tahitian, and in addition, several Chinese merchants from outside Aoua deliver bread there. It is therefore simple for the Aoua, and most other rural Tahitians, to purchase imported foods. But when they want to purchase traditional foods they find it more difficult because fresh fish, breadfruit, taro and other traditional foods are seldom sold in the rural areas. The farmers and fishermen all send their products to the central market in Papeete which is the only public market on the island. To buy traditional foods the Aoua must either make a special trip to Papeete, have a member of the family working in Papeete visit the market, or commission someone to make the purchase and send the food to Aoua.

The Aoua have been forced, so to speak, to turn to imported foods because of their rational economic choices. First, upon taking up wage labor they had to

substantially reduce subsistence farming and fishing. And second, because of considerations of relative cost and convenience they came to purchase imported foods more often than traditional foods. Economic considerations have overruled taste preferences among the Aoua.

Their preference for traditional foods is expressed at least once a week, however. Aoua wage laborers commonly save some money for a large Sunday meal of fresh fish, taro, sweet potatoes and other Tahitian foods. Because they do not work on Sundays they have time to make a special trip to the Papeete market to purchase food. Only on Sundays are the Aoua consistently 'unecomic' in their choice of food.

CONCLUSION

Efforts to improve the nutritional level of the Tahitian diet must take into account the economic factors of food choices. If economic development is a desired goal, it is unrealistic to expect Tahitians to return to subsistence farming. Education of Tahitian consumers about the superior nutritional merits of many traditional foods might sway purchasing choices, but probably not until traditional foods become more competitive with imported foods. Traditional foods must be made cheaper. Commercial food crop production and commercial fishing should be improved to increase supplies and lower the cost of traditional foods. In addition, the inadequate and overcentralized system of distributing fresh fish and food crops should be improved so that Tahitian consumers can purchase traditional foods as easily as they can purchase imported foods. Without these or similar measures the Tahitian consumers will continue to prefer imported foods over traditional foods.

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