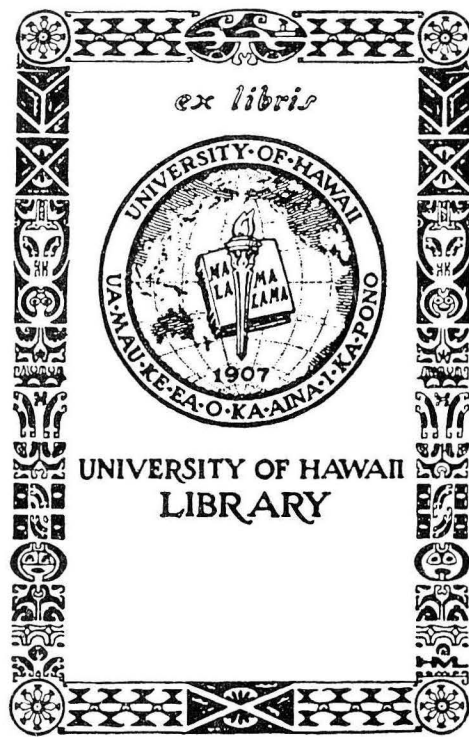


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# Some Recent Developments in the Marketing of Foods in Hawaii

by C. W. Peters and John L. Rasmussen





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## PREFACE

This publication is based on research conducted under Hawaii's phase of Western Regional Marketing Project WM-40 on "Procurement Policies and Practices of Large-Scale Food Retailers." The Agricultural Experiment Stations of Colorado, Hawaii, Idaho, Oregon, Washington, and Wyoming; and the Economic Research Service of the U. S. Department of Agriculture have been cooperating in this regional research program.

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In recognition of their contribution to this research, the authors wish to express particular appreciation to Mr. J. Robert Carney, Mr. Elmer R. Hutchison, and the late Mr. Frank Bellows. These men have been closely associated with the food trade in Hawaii and their observations provided much useful background information. Constructive suggestions on the manuscript were received from several colleagues in the Department of Agricultural Economics, as well as from Mr. Carney. Photographs used in this report were made available through the courtesy of Foodland Super Market and Times Super Market, and through Masao Miyamoto of the University of Hawaii.



## SOME RECENT DEVELOPMENTS IN THE MARKETING OF FOODS IN HAWAII

C. W. PETERS and JOHN L. RASMUSSEN

### INTRODUCTION

In terms of sales the food business ranks at the top of all industry groups in the United States. This fact is of great consequence to farmers because of the large share of agricultural production that is eventually channeled into consumption through food stores in both the fresh and the processed form. Marked changes have been occurring in the food marketing system of the United States and these developments have had a substantial impact on agriculture. Of particular importance to farmers is the integration that has taken place in the food business over the period since the 1920's when the chain stores and supermarkets have come into particular prominence. With the shift to operation of chains and supermarkets, many of which are integrated both vertically and horizontally, it was inevitable that the food dealers should improve their bargaining position to a marked degree.

With the changing pattern of organization and structure in the food trade, the producer of agricultural products has often found that his relative position in the market has deteriorated. There have been claims that farm prices are too low and that retail prices are too high. Various committees of the Congress and agencies of the U. S. Government have investigated the food trade in recent years. At the state level, the Hawaii Legislature has shown an active interest in the components of food prices.

A drastic change has occurred in the food trade of Hawaii since the close of World War II. Up to 1945 the food business in the State was dominated by small retailers who purchased the great bulk of their supplies from local wholesale dealers. Supermarkets in the mainland pattern began making their appearance in the Islands soon after 1945 but they assumed major importance only during the 1950's. While this change was taking place at the retail level, a similar shift has been underway at the wholesale level. With the development of large-scale retail outlets there has been a distinct shift to direct buying from mainland suppliers. As a consequence of this changing market structure several of the regular, service-type wholesalers that formerly operated in the State have discontinued this activity. At the same time, there have been at least two cooperative-buying organizations established by the independent retailers. These retailer cooperatives are basically nonprofit organizations that have as their primary purpose the consolidating of purchasing power in order to realize savings through volume buying.

Another notable factor since 1950 has been the aggressive effort of the Armed Services to buy a larger share of their food requirements from growers and dealers in Hawaii. This program has met with varying degrees of success and so far as local agriculture is concerned, the principal group involved has been the produce growers.

From 1945 to 1961 when the supermarket was gaining steadily in Hawaii's food trade, the firms that operated these markets were locally controlled. This situation may change, however, because it has recently been announced that one of the major food chains on the Mainland plans to open stores in the Islands beginning in 1962. Hawaii's farmers have adjusted in part to the changing market structure in the local food trade but the adjustment is neither uniform among commodity groups nor is it complete at any point. It is apparent that the diversified agriculture in the State cannot simply stand by in the face of the increasing domination of the food business by supermarkets, the entrance into island trade by mainland food chains, and the partially unmet demand for fresh farm products on the part of the military. If the challenge of these new conditions is not met by Hawaii's farmers through mutual action, then the small farmer may find his bargaining position weakened to the point where he will have difficulty in maintaining even his present share of the total food market. To assume otherwise would be to ignore experience on the Mainland, where the shift to large-scale, integrated systems of food stores has been in progress much longer than in Hawaii.

### OBJECTIVE

This research was undertaken as one phase of a Western Regional Project in which Hawaii and several other states are studying the procurement policies and practices of large-scale retailers. In Hawaii's project the immediate objective has been to identify changes that have occurred in the local food marketing system with particular emphasis upon the development of supermarkets. Secondary attention has been focused on the Armed Services as an outlet for locally-grown farm products.

Based primarily on analysis of the policies and practices of food stores and military procurement agencies in Hawaii, the study then evaluates the local farmer's position in supplying agricultural products to these outlets. The impact of the concentration of buying power in the hands of constantly fewer firms and organizations on the bargaining position of island farmers is examined. Both short-term and long-range implications of the existing and prospective changes in the local market structure are considered from the standpoint of the farmer and others engaged in the Hawaii food trade.

### PROCEDURE

Most of the data utilized in this publication have been assembled from secondary sources. Extensive use was made of the reports issued on the Census of Business that is conducted regularly by the U. S. Department of Commerce. Other references included publications authored by colleagues in various states<sup>1/</sup> and in the U. S. Department of Agriculture who are engaged in similar research.<sup>1/</sup>

<sup>1/</sup> For additional and more detailed treatment of changes in food distribution in the United States as a whole, it is suggested that the reader refer to the following publications:

De Loach, D. B., Changes in Food Retailing, Washington Agricultural Experiment Station (Bulletin 619), October 1960.

Mueller, Willard F. and Leon Garoian, Changes in the Market Structure of Grocery Retailing (Madison: University of Wisconsin Press), 1961.

An Economic Inquiry into Food Marketing, Part I: Concentration and Integrating in Retailing (Federal Trade Commission, Washington, D. C.: Government Printing Office), 1960.



Statistics of Hawaiian Agriculture and other publications of local origin also provided much useful data. Sources of such information are indicated at the appropriate points in the text of this report.

The analysis of inshipments of foods to Hawaii from 1955 to 1961 is based on a detailed tabulation of items listed on ship manifests covering selected months during the period involved.

Personal interviews were the principal source of background information. These conferences, with individuals who either have been or are now actively engaged in the local food trade, also provided the major base for evaluation of the current situation in the procurement of foods by retailers and military agencies in Hawaii.

### STRUCTURE OF THE RETAIL FOOD MARKET

An understanding of both the historical development and current status of the food trade is an essential prelude to any objective evaluation of the position of Hawaii's farmers in relation to the local market for their products. It is necessary to examine trends as well as recent developments in order to understand existing relationships in this market and to forecast probable future developments. Through this process it is possible to gain an increasing awareness of the bargaining position of the local farmer and the effect of that position on Hawaii's agriculture.

#### Number and Size of Grocery Stores

Prior to World War II the food trade of Hawaii was characterized by the small, service-type store that was in most cases operated by a family with a minimum of hired help. Many rural areas were also served by plantation stores. The supermarket, operated as a single unit or as a chain, did not assume real importance in the Islands until after 1945. As early as 1928, however, there had been a grocery chain operating in the State and other examples of multiple-unit firms were noted prior to 1940. So far as operating practices are concerned, these stores were not greatly different from the units operated by some of the mainland chains. In general, however, the cash-and-carry and self-service features that were adopted early by mainland chains did not have an extensive impact on local retailers during the pre-World War II period. In the food trade some maintain that during this era a principal determinant of success in a grocery store was the diligence and personality of the operator as an individual rather than adoption of innovations that would lead to more efficient operation. It is reported in trade circles that the mortality rate among grocery stores was high and that many failures occurred in all size groups. Some failures were noted even among the local chains or multiple-unit groceries.

Hawaii's economy changed drastically between 1939 and 1944. Population increased from 415,000 to 491,000 in the State as a whole, but in Honolulu the gain was from 154,000 to 252,000, which is an exceptionally rapid rate of growth. General business activity throughout Hawaii was greatly stimulated by wartime activities, although Honolulu was the center of the expansion. The immediate impact of World War II on the food trade was not so much to change the existing patterns of retailing as it was merely to increase the volume of business done by the stores that were already in operation. Material and manpower shortages



Neighborhood groceries of this type continue to serve Hawaii consumers.

during the 1940-45 period undoubtedly explain much of the failure of grocery stores to gain in number despite the rapid increase in volume of business per store. By 1948 there were 1,219 groceries in Hawaii and 574 of these were located in Honolulu (see tables 1 and 2). These totals represented a gain of 11 percent for the State and a decline of 15 percent for the City, as compared to 1939. At the same time sales per store were advancing rapidly. Average sales per store for Hawaii were \$18,700 in 1939 and \$81,500 in 1948, or over a fourfold increase in unit dollar volume. Physical volume handled did not increase so rapidly because of changes in the price level.<sup>2/</sup> Table 3 shows that after sales are adjusted for the increase in food prices, the volume per store doubled from 1939 to 1948. This is still an exceptional showing, however, because in the United States at large the gain was 50 percent. Grocery stores in Honolulu showed somewhat greater percentage gains in dollar sales than were reported for the entire State (350 percent vs. 335 percent) but the difference was not great, particularly after such sales are adjusted for changes in the price level. It is generally agreed among local observers that the 1939-48 period was perhaps the zenith for the conventional type of grocery store in Hawaii. Sales volume per unit was high even though the great majority of stores continued to operate in much the same manner as had prevailed before World War II.

After 1948 a drastic change took place in the retailing of foods in Hawaii. It was at this time that the supermarket became an important influence in the trade. Furthermore, local chains of supermarkets began to appear and this led to significant changes in operating methods. Competition became an increasingly serious threat to continued prosperity, and to even the very existence, of those food stores that operated in the usual, conventional manner by providing customer service, including credit and sometimes home delivery. Shopping centers were beginning to appear in suburban areas, on the island of Oahu in particular, and each such center normally included a supermarket among its list of business houses. From 1948 to 1954 the number of grocery stores in Hawaii declined rapidly from 1,219 to 715, which is a drop of over 40 percent. The volume of business per store advanced at the same time, however, and the gain in average unit volume was from \$81,500 to \$136,900 with the result that total dollar sales in 1954 were roughly equal to those listed for 1948. If dollar sales are deflated to reflect the change in price level, then it is apparent that over-all grocery sales in Hawaii declined moderately during the period; but this is not unexpected in view of the decline in population and depressed business activity that were noted at the same time.

In Honolulu the number of grocery stores dropped from 574 in 1948 to 366 in 1954. This was about the same rate of decline as was indicated for the entire State. Sales volume per store increased from \$95,600 to \$152,100 and this represented approximately the same rate of gain as for all grocery stores in Hawaii. It is of interest to note that although average sales per store in 1939 were lower for Hawaii than for the United States, by 1948 Hawaii's adjusted average sales (table 3) were substantially higher than the national mean. For the State the average of \$78,300 compared with the U. S. figure of \$63,000 and Honolulu's sales per store of \$91,800 represented an even greater margin over the national average. In considering the relationship of dollar sales in Hawaii

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<sup>2/</sup> Increases in freight rates and in margins taken by dealers, as well as the advance in the price of foods as such, were a factor entering into the general price situation. Beginning about 1955, the use of trading stamps by food stores in Hawaii also affected the price level.

Table 1. Number of grocery stores and volume of sales,  
State of Hawaii, 1939-58

Year	Stores	Sales, total	Sales, per store
	<u>Number</u>	<u>1,000 dollars</u>	<u>Dollars</u>
1939	1,101	20,563	18,676
1948	1,219 <sup>1/</sup>	99,337 <sup>2/</sup>	81,491
1954	715 <sup>3/</sup>	97,856 <sup>4/</sup>	136,862
1958	719	138,351	192,421

<sup>1/</sup> Revised to 1,191.

<sup>2/</sup> Revised to \$99,294,000.

<sup>3/</sup> Revised to 737.

<sup>4/</sup> Revised to \$98,264,000.

Source: Census of Business, U. S. Department of Commerce.

Table 2. Number of grocery stores and volume of sales,  
City of Honolulu, 1939-58

Year	Stores	Sales, total	Sales, per store
	<u>Number</u>	<u>1,000 dollars</u>	<u>Dollars</u>
1939	675	14,343	21,249
1948	574	54,875	95,601
1954	366	55,659	152,074
1958	370	75,527	204,127

Source: Census of Business, U. S. Department of Commerce.

Table 3. Adjusted sales of grocery stores; State of Hawaii,  
City of Honolulu, and United States; 1939-58<sup>1/</sup>

Year	Sales per store, Hawaii	Sales per store, Honolulu	Sales per store, United States
	<u>Dollars (deflated)</u>	<u>Dollars (deflated)</u>	<u>Dollars (deflated)</u>
1939	39,652	45,115	42,300
1948	78,281	91,836	63,000
1954	121,547	135,057	109,400
1958	159,951	169,682	139,813

<sup>1/</sup> Adjustment is based on changes in the index of retail food prices (Bureau of Labor Statistics, U. S. Department of Labor) with 1947-49 = 100.



Interior views of Honolulu supermarkets.

to those on the Mainland, it is extremely important that proper weight be attached to the disparity between food prices in the Islands and those prevailing elsewhere in the United States. Because of the generally higher food prices in the State, this factor would reduce, but probably not completely eliminate, the indicated margin of sales in favor of Hawaii's grocery stores.

From 1954 to 1958 there was little change in the number of grocery stores in Hawaii. At the time of the 1958 Census of Business there were 719 stores in the State and 370 in the City of Honolulu. During the interval following 1954 population again increased rapidly on the island of Oahu but sales volume per store advanced at an even faster rate. In 1958 the average sales per store were \$192,400 for Hawaii and \$204,100 for Honolulu. This was a gain of 40 percent over 1954 for all stores and about 35 percent for those in Honolulu. Opening of a number of supermarkets outside the city limits of Honolulu probably accounts for the greater rate of gain for the State. Adjusted (deflated) sales per store were \$160,000 and \$169,700 for the State and City, respectively. The comparable figure for the United States was \$139,800, which represented a gain of 30 percent over 1954. From 1954 to 1958 Hawaii's grocery stores did not advance much more rapidly than the U. S. average when deflated average sales per store are considered.

#### Employees and Sales of Grocery Stores

During the two decades from 1939 to 1958 the grocery business of Hawaii shifted basically from a family-type operation to one in which a substantial number of persons are employed on a salary or wage basis. By 1958 there were over 3,300 persons in the hired labor force of Hawaii's grocery stores. This represented almost a threefold increase over the number reported for 1939 (tables 4 and 5). As was noted above, the number of stores declined by over one-third during the same period. On a per-store basis employees averaged slightly over one in 1939 but by 1958 this number was over four and a half. Averages for the City of Honolulu were not greatly different from those for the State. About 50 percent of the grocery store employees were listed by firms operating in Honolulu.

A substantial gain that averaged about 150 percent is noted in dollar sales per employee when the 1939 averages are compared with those for 1948. From \$16,200 in the State and \$17,500 in Honolulu, this average moved up to \$41,100 and \$44,400, respectively, during this decade. In terms of physical volume handled the increase is not so spectacular because of the rising prices of food items. Since 1948 the sales per employee have not gained materially even in terms of dollar volume; in fact, there has actually been a decline in sales per employee if changes in the price level are considered. Changes in hours worked and in other conditions of employment may account for the relatively stationary position of this indicator from 1948 to 1958. It is obvious, for example, that shortening of the work week and initiation of new services such as prepackaging would tend to retard an increase in sales per employee. The Census of Business for Hawaii indicates less than a 1 percent rise in relationship of payroll to dollar sales from 1948 to 1958 (5.1 percent vs. 5.7 percent). During this period, however, there was a general increase in hourly rates of pay for grocery store employees and some of the supermarkets were unionized.<sup>3/</sup>

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<sup>3/</sup> This statement is confirmed by records of the Hawaii Employers Council.

Table 4. Employees and sales of grocery stores,  
State of Hawaii, 1939-58

Year	Employees, total	Employees, per store <sup>1/</sup>	Sales per employee <sup>2/</sup>
	<u>Number</u>	<u>Number</u>	<u>Dollars</u>
1939	1,266	1.15	16,242
1948	2,417	1.98	41,099
1954	2,294	3.21	42,657
1958	3,361	4.67	41,164

<sup>1/</sup> The number indicated is a mathematical average derived by relating the number of employees reported to the number of stores. The fact that employees as individuals are indivisible is necessarily ignored.

<sup>2/</sup> Obtained by relating total sales to the number of employees reported to the Census.

Source: Census of Business, U. S. Department of Commerce.

Table 5. Employees and sales of grocery stores,  
City of Honolulu, 1939-58

Year	Employees, total	Employees, per store <sup>1/</sup>	Sales per employee <sup>2/</sup>
	<u>Number</u>	<u>Number</u>	<u>Dollars</u>
1939	818	1.21	17,534
1948	1,235	2.15	44,433
1954	1,159	3.17	48,023
1958	1,671	4.52	45,199

<sup>1/</sup> The number indicated is a mathematical average derived by relating the number of employees reported to the number of stores. The fact that employees as individuals are indivisible is necessarily ignored.

<sup>2/</sup> Obtained by relating total sales to the number of employees reported to the Census.

Source: Census of Business, U. S. Department of Commerce.

The data summarized in tables 4 and 5 are presented here primarily as a means of emphasizing the change in organization and operation of food stores that has occurred in Hawaii since the pre-World War II period. It is not the purpose of this study to investigate the manner in which labor is utilized by food stores or the efficiency of such labor.

#### Population and Number of Grocery Stores

In contradiction to the assumption that Hawaii has many more small food stores than other states, it was found that in 1939 the number of persons per grocery store was higher in Hawaii than in the United States as a whole (table 6). In contrast, however, Honolulu alone showed only some two-thirds as many persons per store as did the United States and about 60 percent as many as for the entire State. It becomes evident that in 1939 the City of Honolulu, with 229 persons per store, was characterized by small neighborhood units while the State as a whole, with 377 persons per store, could not be so classified. Outside Honolulu the grocery stores served a much larger number of people per store but sales per person were considerably below those in the City. Higher purchasing power and difference in eating habits on the part of the Honolulu residents probably explains much of this difference. It is probable also that some residents of suburban areas purchased foods in the City and thus increased the sales of Honolulu stores.

From 1939 to 1948 a substantial shift took place in the ratio of population to grocery stores, both in Hawaii and in Honolulu. The greater change occurred in Honolulu, where the number of persons per store almost doubled from 229 to 439. At the same time the increase for the entire State was from 377 to 403. In 1948 the national average was 418, which would indicate that Honolulu experienced a greater than average development of larger-scale grocery stores while relatively little change was noted for the State at large. As a matter of fact, if Honolulu's influence were removed from the data for the State it is probable that the number of persons per store would actually have declined in the area outside the City. This is a logical result of the concentrated population build-up in Honolulu and the relative stability in number of grocery stores operating there.

Table 6. Population in relation to number of grocery stores; State of Hawaii, City of Honolulu, and United States; 1939-58

Year	Persons per store, State of Hawaii	Persons per store, City of Honolulu	Persons per store, United States
	<u>Number</u>	<u>Number</u>	<u>Number</u>
1939	377	229	338
1948	403	439	418
1954	673	675	581
1958	801	830	670

Source: Bureau of the Census, U. S. Department of Commerce, and Population Statistics issued by the Hawaii Department of Health.



After 1948 the development of larger store units proceeded more rapidly in both Honolulu and Hawaii than in the United States as a whole. In 1954 the State had one grocery for 673 people; in Honolulu the figure was about the same--675. In light of the relatively slow movement toward fewer and larger groceries that was indicated for Hawaii outside of Honolulu from 1939 to 1948, it is indeed significant that by 1954 the state average of persons per store should be about equal to the figure for Honolulu itself. During the period from 1948 to 1954 the shift in the population-store ratio was the direct result of rapidly declining store numbers because population itself actually decreased.

With the resumption of population growth in Hawaii after 1954 and the maintenance of almost complete stability in number of grocery stores, the ratio of persons to groceries continued to move forward steadily. On the basis of the 1958 Census of Business it is indicated that Hawaii had one grocery for each 801 of its people while Honolulu had a store serving every 830 persons. Here again the average for the State is greatly influenced by the rapid build-up of population in Honolulu and on Oahu. In each case the average was considerably above the national ratio of 670 persons per store. With approximately 20 percent more persons per store than was indicated for the nation in 1958, it seems evident that Hawaii has in recent years experienced in full measure the general movement toward development of larger-scale food stores.

#### Concentration of Grocery Sales

The degree to which sales are concentrated in the food trade has a very strong influence upon the buying practices of grocery stores. Generally speaking, the greater the concentration the more difficult it is for the smaller suppliers to bargain effectively for a share of the food business. The array of Hawaii's groceries, by volume of business, that is contained in table 7 indicates clearly the trend toward greater concentration of the food trade in fewer firms. In 1939 there were 42 grocery stores that had sales of over \$100,000 for that year. When the 1948 Census of Business was taken there were 271 stores with a volume of more than \$100,000, and 53 of these stores reported over \$300,000 in sales. In 1954 there were only 226 stores above \$100,000, but 16 of these were in the \$500,000-\$999,000 category and 14 had sales of over \$1,000,000. From 1939 to 1954 the stores doing less than \$20,000 business per year declined drastically from 876 to 146. Even after allowing for changes in the price level of foods, there was apparently a strong movement toward concentration of the grocery trade in a relatively few firms doing a large volume of business.

Approached from a slightly different point of view, the trend toward greater concentration in the Hawaii food trade is even more evident when the share of the total sales reported by the largest stores is considered. In 1939 the 42 stores listed in the "\$100,000 or more" grouping were doing almost 39 percent of the business reported by grocery stores in Hawaii.<sup>4/</sup> That the supermarket had not yet assumed a dominant position by 1948 is the logical deduction from the fact that the report for that year showed the 53 largest groceries doing only 26.5 percent of the total business for such stores. But within a few years the situation had changed materially because the 1954 Census indicates that 30 stores were doing 39 percent of the total business reported by Hawaii's grocery stores. Similar census data for 1958 were not yet available at the time this

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<sup>4/</sup> Data obtained from Census of Business, U. S. Department of Commerce.

Table 7. Distribution of grocery stores, by volume of sales,  
State of Hawaii, 1939-54

Sales	1939	1948	1954
Dollars	Number	Number	Number
300,000 or over	<u>1</u> / <sup>1/</sup>	53	66 <sup>2/</sup>
100,000 to 299,000	42	218	160
50,000 to 99,000	52	215	132
30,000 to 49,000	63	205	100
20,000 to 29,000	68	132	87
10,000 to 19,000	156	162	89
Less than 10,000	720	109	57
Not operated full year		125	24
Total	1,101	1,219	715

<sup>1/</sup> In 1939 the highest category reported was "over 100,000." An undetermined number of stores would properly fall in the "300,000 or over" grouping.

<sup>2/</sup> Of this number there were 16 stores with a volume of 500,000-999,000 and 14 stores reporting 1,000,000 or over.

Source: Census of Business, U. S. Department of Commerce.

report was drafted; however, a local survey conducted by a Honolulu newspaper indicated a substantially greater concentration of food trade in 1962.<sup>5/</sup> On the basis of this survey by the newspaper it appears that over half of the food business in the City and County of Honolulu was being done by 30 supermarkets. The 30 markets listed were owned by 8 different firms with headquarters in Honolulu. This indicates that the trend has continued toward constantly greater market concentration at the retail level.

In almost direct contradiction to this trend toward concentration in food retailing, there has been appearing of late some tendency for firms engaging primarily in other commodity fields to add a line of grocery items. This move has been particularly evident among drug and variety stores in Honolulu, where the supermarkets themselves have developed into direct competition because the food stores are handling nonfood items such as drugs, housewares, and notions. To a very limited extent there has appeared in Hawaii the development of a grocery section in discount houses. This is a relatively new merchandising technique that is gaining some acceptance on the Mainland. It is not likely, however, that these newer outlets for foods will soon alter to any marked degree the dominant position of Hawaii supermarkets in the retailing of foods.

<sup>5/</sup> From data collected in connection with the publication of "Consumer Analysis--Hawaii 1962" by the Honolulu Star-Bulletin, Ltd.

## BUYING PRACTICES OF FOOD RETAILERS

A less spectacular but nevertheless significant change has been occurring in the procurement policies and practices of food retailers. This has taken place alongside and as an integral part of the shifts in organization and structure at the retail level.

### Wholesaling of Foods

Before 1945, retailers usually obtained merchandise of all types through wholesale dealers located in the Islands. Trade sources indicate that two large firms that operated grocery departments were the dominant influence at the wholesale level for many years. This position of influence was limited to trade in dry groceries, however, because there have at all times been a substantial number of wholesale dealers in fresh produce. With the development of supermarkets, either as single units or as local chains, there was an immediate shift toward direct buying from mainland firms or through local sales representatives of mainland suppliers. The conventional wholesalers in Hawaii then found it increasingly difficult to maintain their position, as shown by the closing-out of the grocery departments of the two firms that had been the leaders in the field up to the late 1940's.

Wholesaling of foods has experienced a decline relative to the growth of the over-all food trade in the State but the impact of changing procurement policies on the part of the retailers has not been uniform. There remain in Hawaii several general-line wholesalers and a considerable number of smaller firms that handle specialty lines; e.g., oriental-type foods, frozen foods, dairy and poultry products, etc. Also, Honolulu alone has in excess of 50 wholesale dealers in fresh fruits and vegetables. As wholesaling has declined in relative importance, particularly for dry groceries and mainland produce, there has been a considerable increase in the activities of brokers and agents who represent mainland sources of supply but who are local residents. It is not unexpected that this should happen because direct buying by retailers tends to give added importance to selling alone, as contrasted to the services performed by the regular wholesalers. Another significant development is the increasing number of mainland manufacturers and processors who have been establishing branches in Hawaii.

According to U. S. Census data, the general-line grocery wholesalers in Hawaii declined by almost 50 percent in number from 1948 to 1958 (from 29 to 15). During that decade the adjusted volume of business done by this particular class of wholesalers also dropped by some 20 percent. This occurred at a time when retail grocery sales in the State were advancing by about one-third. From 1948 to 1958 the sales of miscellaneous wholesalers, mostly dealers in specialty food items and branch houses of mainland firms, increased substantially although the number of firms remained about the same. Approximately this same situation existed for the wholesaling of fresh fruits and vegetables and of meats and meat products during the 1948-58 period. Clearly, direct buying by retailers has had its greatest impact in the handling of dry groceries.

As the supermarkets have developed into their current position of dominance in the retail food business, many of the smaller independent markets have taken cooperative action to offset the advantages gained by the larger units through

their superior buying power. Two cooperative-buying organizations have been formed with headquarters in Honolulu. The organizers and members of these retailer-owned wholesale firms are hopeful that their group action will be an increasingly important factor in Hawaii's food trade. In common with similar firms on the Mainland, these cooperatives have tended to equalize the competitive position between the independent retailers and the supermarket operators. This is accomplished not only through consolidation of purchases but also by reducing the cost of such services as inventory maintenance, credit, and delivery to the minimum.

#### Direct Shipments

In an effort to obtain factual data on the extent to which Hawaii retailers are buying foods directly from the Mainland, a detailed record of inshipments during selected months between December 1955 and May 1961 was compiled from ship manifests of a major steamship company. Figures 1 to 3 are designed to show the relative quantities of dry groceries, frozen foods, and fresh produce, respectively, that were brought to Hawaii by the major types of receivers or consignees during the indicated years. Although the time period covered by this analysis is too short to show fully the growth of direct buying since World War II, it does serve to indicate the sizeable quantity of merchandise that moves directly to retailers, principally supermarkets, and to agents or brokers who themselves often serve only as an intermediary in direct buying by the larger retailers.

Retailers were direct consignees for an average of about 50 percent of the dry groceries unloaded in Honolulu during the sample months extending from December 1955 to May 1961 (figure 1). Retailer-controlled distributors (cooperatives) are included in this category. Data obtained through examination of the manifests of the one steamship line only are necessarily subject to serious limitations. For example, extensive use of a competing shipping service by certain supermarkets during the mid-part of the indicated time period is not reflected.<sup>6/</sup> This alone may account for the fact that in this particular analysis inshipments of dry groceries billed to retailers actually appeared to drop in 1958 and 1959. The indicated temporary decline in receipts by retailers was offset by a corresponding gain in shipments billed to wholesalers and to agents and brokers. These latter categories of consignees averaged about 30 percent and 20 percent, respectively, of the billings over the entire period of 1956-60. By 1961 the great bulk of dry groceries from mainland sources were again reaching Hawaii through the shipping facilities of one carrier and the retailer group had advanced its share of the billings to over 65 percent.

On the basis of the data available, and subject to the limitations mentioned, inshipments of frozen foods, including meats, showed a mixed pattern from 1956 through 1960 (see figure 2). Sales agents and brokers maintained a fairly steady position with about one-third of the total receipts. From 1957 to 1958 there was a considerable increase in shipments of frozen foods to wholesale dealers but this advance was short-lived because by 1960 these firms were down to less than 20 percent of the total. The indicated gains in billings to

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<sup>6/</sup> In 1958 and 1959 the Hawaii Supermarket Association, composed of four local chains, routed a substantial volume of food shipments through the Hawaiian Marine Freightways, Inc. Consolidating of cargo in bulk containers was a major feature of this program.

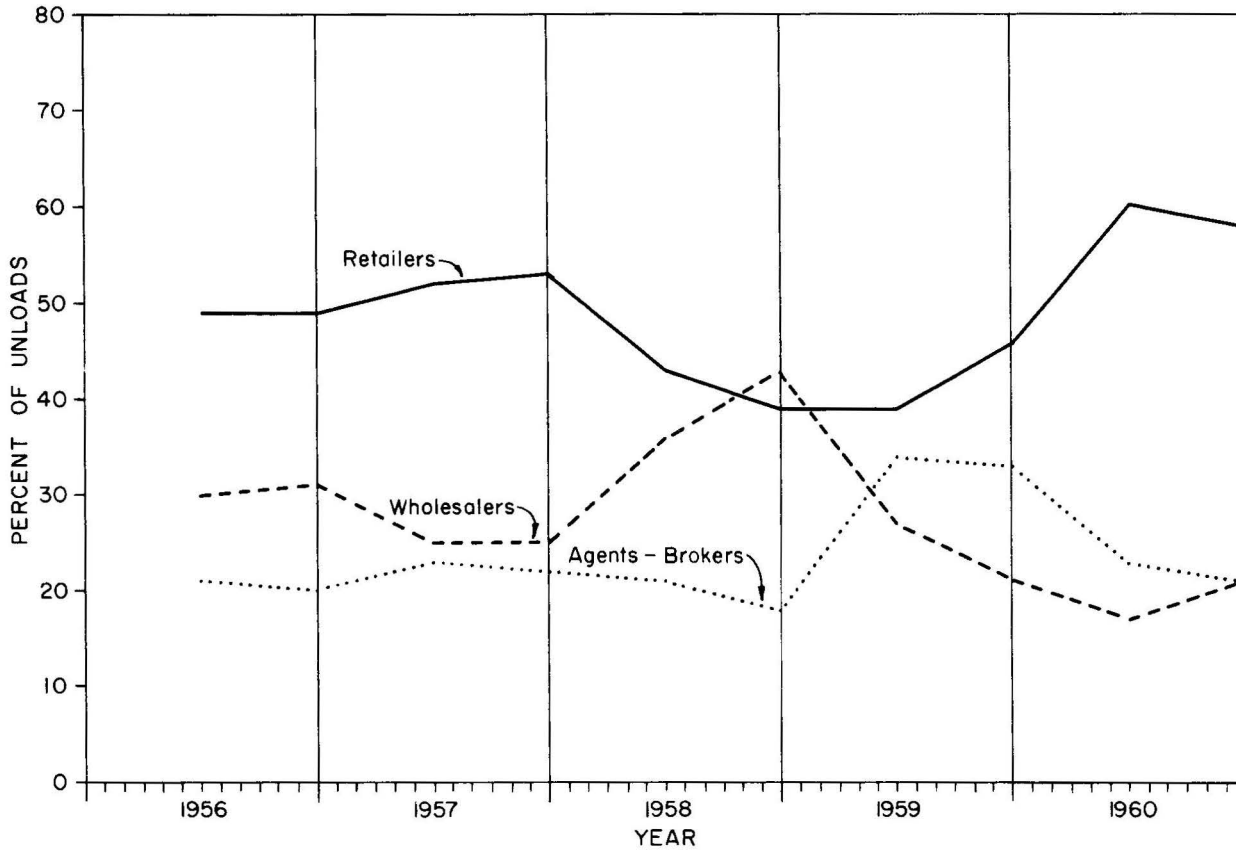


Figure 1. Average distribution of inshipments of dry groceries billed to certain types of dealers in Hawaii, 1956-60.<sup>1/</sup>

<sup>1/</sup> The indicated distribution is based on a 3-point moving average centered first on June 1956 and ending on December 1960. Actual data are for December and June of each year, beginning with December 1955 and ending with May 1961 (June 1961 was eliminated because of a strike situation).

Source: Manifests of one major steamship company for the months of December and June, beginning December 1955. Consignees listed on manifests are the basis of dealer classification although many shipments to retailers were undoubtedly purchased through agents, brokers, and even wholesalers.

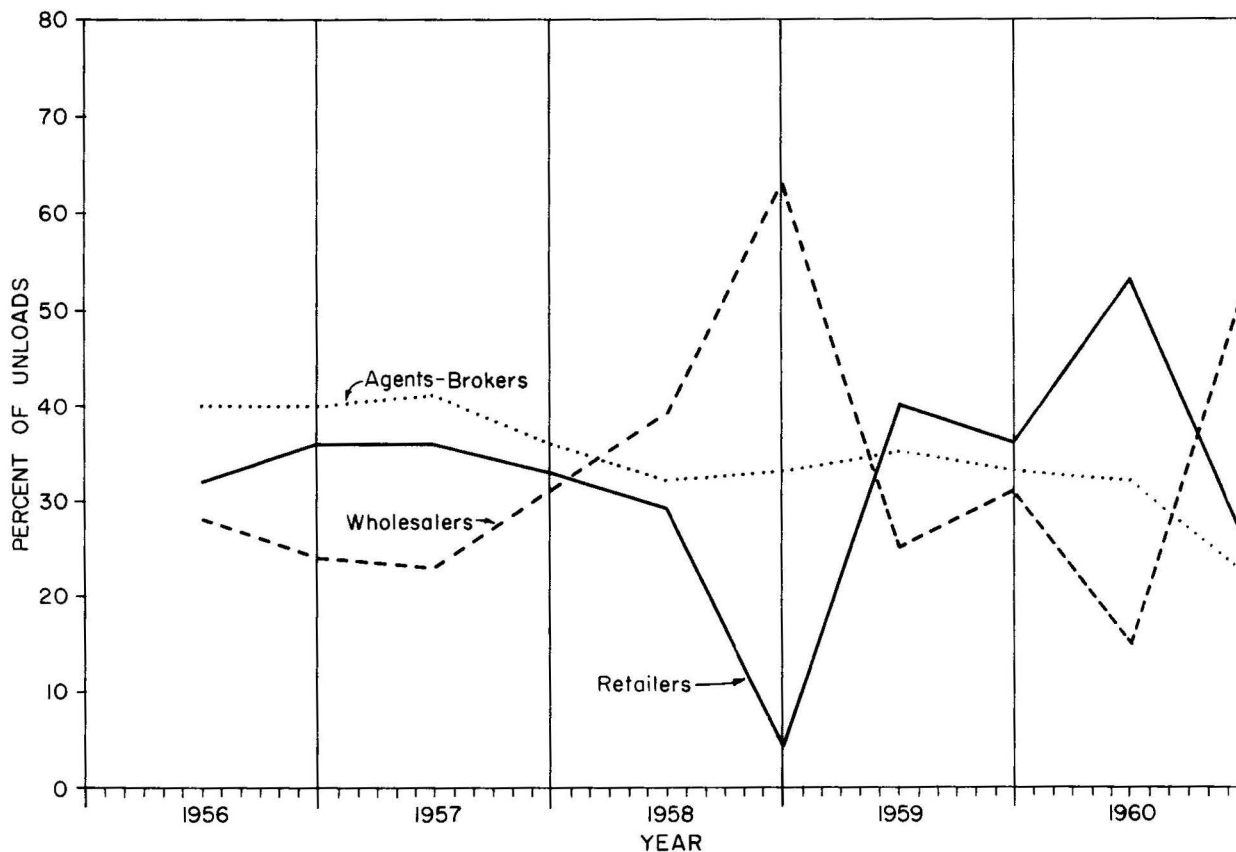


Figure 2. Average distribution of inshipments of meat, poultry, and other frozen foods billed to certain types of dealers in Hawaii, 1956-60.<sup>1/</sup>

<sup>1/</sup> The indicated distribution is based on a 3-point moving average centered first on June 1956 and ending on December 1960. Actual data are for December and June of each year, beginning with December 1955 and ending with May 1961 (June 1961 was eliminated because of a strike situation).

Source: Manifests of one major steamship company for the months of December and June, beginning December 1955. Consignees listed on manifests are the basis of dealer classification although many shipments to retailers were undoubtedly purchased through agents, brokers, and even wholesalers.

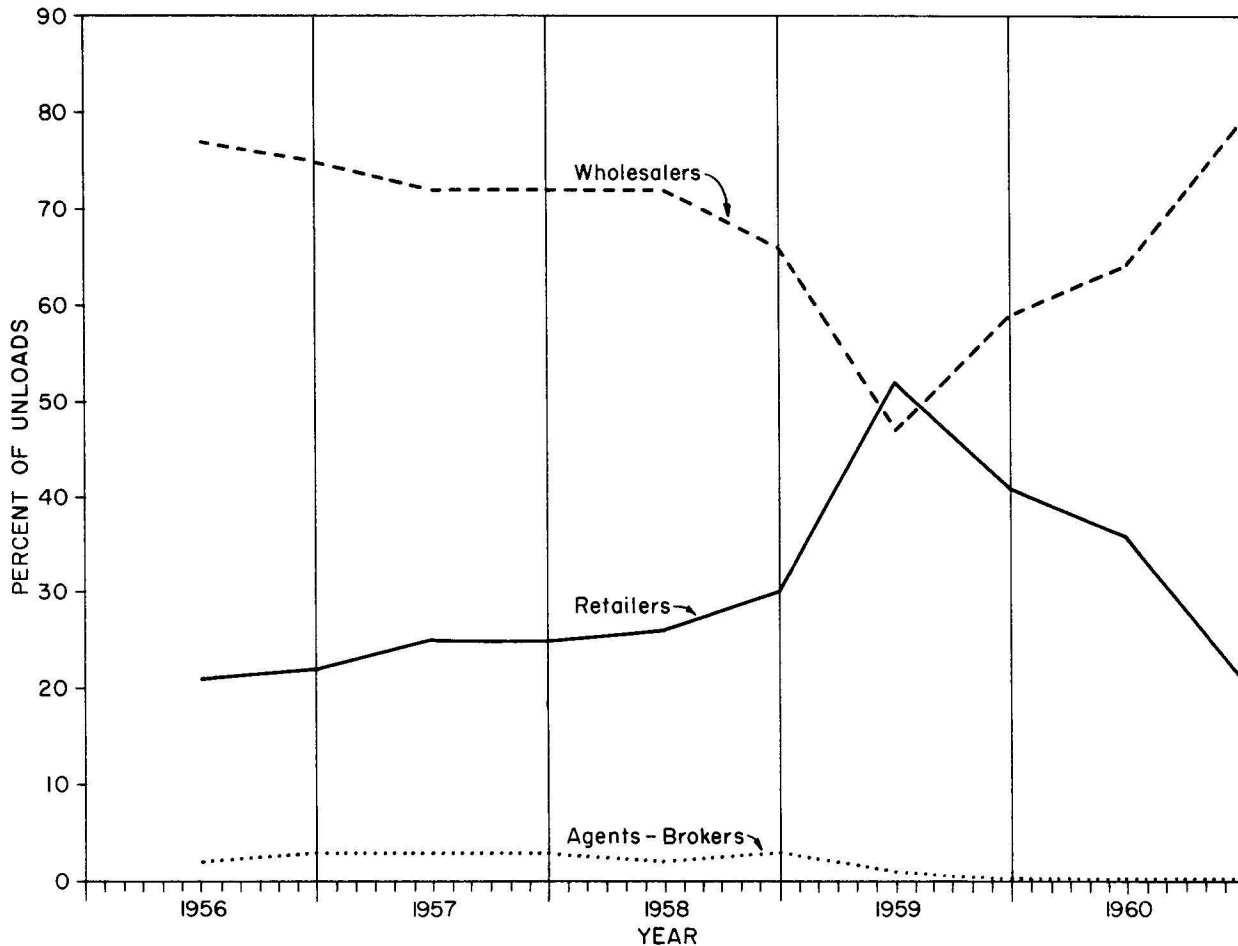


Figure 3. Average distribution of inshipments of fresh fruits and vegetables billed to certain types of dealers in Hawaii, 1956-60.<sup>1/</sup>

<sup>1/</sup> The indicated distribution is based on a 3-point moving average centered first on June 1956 and ending on December 1960. Actual data are for December and June of each year, beginning with December 1955 and ending with May 1961 (June 1961 was eliminated because of a strike situation).

Source: Manifests of one major steamship company for the months of December and June, beginning December 1955. Consignees listed on manifests are the basis of dealer classification although many shipments to retailers were undoubtedly purchased through agents, brokers, and even wholesalers.

the wholesalers were offset in large part by declines in receipts by retailers. Here again, the special ocean shipping program of the supermarket group undoubtedly affected the situation for a short time. In general it may be said that over the 1956-60 period each of the three major groups of consignees accounted for about one-third of the frozen foods.

From 1955 to 1961 there has apparently been a gradual downward trend in shipments of fresh fruits and vegetables to wholesalers. Retailers show some increase in direct billings of mainland produce but on the average the shipments received by retailers were only about one-third of the total. Further, it may be noted from figure 3 that shipments of these commodities directly through agents and brokers have been almost negligible. The pattern of inshipments in this category of foods is at distinct variance with the situation on dry groceries and frozen foods where the position of the retailers as receivers of direct shipments is stronger. Sales agents and brokers are also more important factors in the commodity fields other than fresh produce, although produce salesmen are undoubtedly responsible for many of the shipments to both retailers and wholesalers. The relative dominance of wholesalers in the handling of fresh produce is to some extent the direct result of a policy on the part of the retailers not to maintain extensive warehouse space for perishables. Another explanation lies in the dependence of retailers upon produce dealers for almost all of their supply of locally-produced fruits and vegetables. It is obvious that direct buying by retailers, including supermarkets, has not progressed so rapidly in this commodity area as in others. Still another important factor affecting the distribution of these inshipments is the routing of a considerable volume of military business through the local produce wholesalers.

#### Private Labels

Private labels are an important factor in the merchandising program of chains and supermarkets on the Mainland. This is particularly true of the chains that operate a large number of units. In Hawaii the largest number of stores under one management is 11 (January 1, 1962) and as was noted above, there is currently no mainland-based firm represented in the retail food business of the Islands.<sup>7/</sup> Direct buying on specification is conducive to use of private labels but Hawaii retailers have tended to concentrate their efforts on packers and processors labels, particularly the nationally advertised brands. There are a few cases in which private labels are used by Hawaii supermarkets on such products as coffee, flour, soap, and frankfurters. Also, the retailer cooperatives and some supermarkets in the Islands have access to certain private labels of firms based on the Mainland. Use of this merchandising technique will undoubtedly expand in Hawaii but at the moment it has not made any great progress. This may be attributed in large part to the relatively limited volume of business done by even the larger of the local chains of supermarkets.

#### Miscellaneous Integrative Activities

Within the supermarket group several firms have formed a trade association through which joint action may be taken on problems of mutual concern. At one time this group of stores participated in a special arrangement with an ocean

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<sup>7/</sup> The Honolulu Star-Bulletin of November 30, 1961, reported that Safeway Stores, Inc., will open five supermarkets in Hawaii. This intent was later reported in several trade journals.



carrier for transportation of merchandise from the Mainland to Hawaii. This action represented a joint effort to reduce costs on direct shipments from mainland sources. It is a minor example of the advantage of bargaining power that attaches to the large volume of business done by the supermarkets.

Hawaii's large retail stores have moved very slowly in acquiring control of either production facilities or intermediary firms in the marketing process. It is reported that certain local supermarkets have a limited ownership or management interest in a few poultry enterprises and occasionally serve as an exclusive outlet for certain producers or wholesalers. Retail grocery stores in the Islands, in contrast to mainland chains, have not yet extended their activities to include such things as baking, coffee-roasting, milk distribution, and operation of private truck lines. Of course, many of the independent stores do cooperate in operating the two relatively large, retailer-owned wholesale firms located in Honolulu and thereby achieve some of the benefits of both horizontal and vertical integration. Generally speaking, however, Hawaii's food dealers are not sufficiently large to engage extensively in vertical integration.

#### THE MILITARY MARKET IN HAWAII

In Hawaii the military establishment is a major segment of the local economy. It is an important outlet for farm produce although island farmers have not yet taken full advantage of this potential market. During recent years, particularly beginning in 1953, there has been in effect an active program through which the military agencies based in Hawaii have endeavored to step up the procurement of foods produced in the State. To the present time this program in which both the Navy and the Army participate has not brought out the anticipated response among Hawaii's farmers. This potential outlet for relatively large quantities of fresh fruits and vegetables and a more limited quantity of livestock and poultry products represents the largest single unit through which local products might be marketed.

Buying procedures of the military agencies vary according to the branch of service involved. It is the policy of the Navy to contract as much as 90 to 120 days in advance for locally-grown produce. With this lead time the truck farmer can plan his production schedule and also know at what price his produce will be sold, providing it meets contract specifications. In contrast to this procedure, the Army in Hawaii normally purchases local products on the open market at the going price. In either case the prices paid for such commodities are expected to be reasonably in line with the landed cost of comparable items shipped from the Mainland. The Navy in particular bases its procurement program on volume purchases of high-quality, graded products. Apparently, the Army purchasing agents are permitted greater latitude in their day-to-day buying activities.

So far as military commissaries in Hawaii are concerned, they may or may not use similar channels in buying local farm products. Generally, the Army commissaries obtain most of their supplies through the Quartermaster's office. Navy and Marine commissaries, however, may buy at will so long as they get the best price possible consistent with quality of the product purchased. Where highly perishable products that are produced locally may be available, the usual

practice of all service commissaries is to buy these items in Hawaii so long as the price is within a reasonable range.

A study of the military establishments as an outlet for Hawaiian products was conducted in 1959 by what is now the State Department of Economic Development.<sup>8/</sup> The report based on this study indicated that the military offers a sizeable potential outlet for Hawaii farm products but that for a number of reasons this potential is not being realized by local farmers. Apparently, the experience of the military in procurement of local products varies greatly from commodity to commodity. Milk, for example, is obtained in ample quantity although a part of the supply is in the reconstituted form. Among the red meats only a limited amount of local beef is purchased for military use. This is in part the result of limited available supplies of the higher grades of local beef. Except for sale in commissaries, very little of the military's supply of poultry meat and eggs has been of local origin, mostly because of the inability of Hawaii's producers to compete on price. A considerable quantity of fresh vegetables and some fruits produced in the State have been channeled to the military market but deliveries of these commodities have been considerably below expectations. Weather, planting schedules, price levels, and lack of farmer organization have all contributed to the relatively poor performance record of Hawaii farmers in supplying the needs of the military market for fresh produce. It has been indicated by the Navy that only about half of its requirements for locally-grown vegetables is being met by suppliers who contract with that branch of the military.<sup>9/</sup>

Sporadic efforts have been made to organize farmers, wholesalers, and other interested persons on an industrywide basis in order to encourage development of the military market for Hawaiian food products. An organization known as the Produce Information Exchange (PIE) originally contemplated a planned program through which both the Navy and the Army procurement agencies would be assured of an adequate supply of high-quality, local farm produce at competitive prices. Despite these efforts, the performance record of suppliers who have contracted with the military is not particularly outstanding. For example, of contracts totaling about 6 million pounds of fresh fruits and vegetables that were placed by the Navy between September 1959 and September 1961, only some 74 percent of the produce was delivered and of the deliveries about 15 percent was rejected because it failed to meet grading requirements. In the Navy's contracting program an effort is made to encourage bidding by farmers or groups of farmers. This is indicated by the award to such bidders of contracts for about one-third of the advance orders for fresh fruits and vegetables placed during the 2-year period ending in September 1961. The Army policy of making spot purchases is not conducive to direct sales by growers unless they are organized in such a manner as to have a sales outlet in the produce market or elsewhere in Honolulu.

#### ORGANIZATIONAL STRUCTURE OF HAWAII AGRICULTURE

From the foregoing discussion of developments among the local market outlets for Hawaiian farm products it is apparent that a marked concentration

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<sup>8/</sup> Swenson, et al, The Potential for Increasing Sales of Food Products to the Armed Services Based in the Pacific, EPCA Staff Report No. 19, Hawaii Economic Planning and Coordination Authority, December 1959.

<sup>9/</sup> Source: The Honolulu Advertiser, December 4, 1961.

of buying power has occurred in which a relatively few firms operating super-markets, and the military procurement agencies are the principal outlets for the diversified farm products of Hawaii. In contrast to this structure which in some respects might be called an oligopsony (few buyers), the diversified agriculture<sup>10/</sup> of the State has not changed to a similar degree by developing fewer and larger operating units. Furthermore, the organization of small farmers into cooperatives or other bargaining units also has lagged seriously.

The major agricultural enterprises of Hawaii are sugar and pineapple, both of which are marketed in large part on the U. S. Mainland. These two commodities are produced mostly on plantations which are a part of a highly integrated organizational structure. The 27 sugar plantations and 7 pineapple companies that dominate their respective industries are themselves sufficiently large and centrally controlled to bargain effectively with prospective buyers, whether the market outlets are located in Hawaii or elsewhere.

It is among the producers of livestock products and diversified crops that the small units with an individually weak market position are found in considerable number. The U. S. Census of Agriculture indicates that farms in Hawaii have increased from 5,750 in 1950 to 6,242 in 1959. Over 55 percent of the farms reported in 1959 were under 10 acres in size. Income per farm was less than \$2,500 on 3,786, or some 60 percent, of the farms in the State. At the same time there were but 437 farms reporting income in excess of \$20,000 in 1959.

Among the various enterprises represented in Hawaii's diversified agriculture there has been a great deal of variation in the developmental pattern of the different units. In some lines such as poultry and hogs there has been a marked decline in number of farms and a consequent increase in output per unit. The dairy and beef cattle enterprises have remained relatively stable in number although production has been moving gradually upward. Among the producers of the several types of diversified crops there have been mixed trends with an over-all increase in units and perhaps a proportionate advance in output. From table 8 it is apparent that it is in the production of diversified crops that the smaller-scale farming tends to dominate. This is particularly true among the growers of fruits and macadamia nuts where many part-time units are in operation. Among the livestock producers the units are relatively large in terms of value of marketings, with the exception of the beekeepers, of whom there are only a few in Hawaii. All of the livestock units, except honey producers, average considerably larger in terms of sales than the crop enterprises. It is perhaps not unexpected to note that the marketing problems are more severe and the market structure less integrated in the diversified crop area.

#### OBSERVATIONS AND CONCLUSIONS

With few exceptions, Hawaii's agricultural products other than sugar and pineapple must be marketed for consumption in the State. Geographically situated as it is, Hawaii is in fact a "pocket" market, which means that the local producers are usually vulnerable to local influences in the handling of

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<sup>10/</sup> Diversified agriculture includes all farm production other than sugar and pineapple.

Table 8. Number of agricultural enterprises and value of agricultural marketings, State of Hawaii, 1960

Enterprise	Number	Total value of marketings	Average value of marketings per unit
		<u>1,000 dollars</u>	<u>Dollars</u>
Vegetables and melons. . .	762	4,593	6,028
Fruits . . . . .	809	1,369	1,692
Coffee . . . . .	1,108	3,488	3,148
Macadamia nuts . . . . .	216	480	2,222
Rice . . . . .	11	40	3,636
Taro . . . . .	202	594	2,941
Beef cattle. . . . .	410	9,342	22,785
Dairy. . . . .	80	10,953	136,913
Hogs . . . . .	284	3,687	12,982
Chickens . . . . .	202	8,448	41,822
Honey. . . . .	18	30	1,667

Source: Statistics of Hawaiian Agriculture, 1960, Hawaii Cooperative Extension Service, University of Hawaii.

their products. Price fluctuations are often much more drastic than would normally be expected as a result of relatively minor variations in the market supply of a commodity.

In Hawaii the supermarket, operated singly or in a chain, has moved forward rapidly since 1945 as an increasingly dominant influence in the marketing of foods. Starting from a position in 1939 where local food dealers were typically small, family-operated units, the pattern had shifted within 10 years to a point where the average sales per grocery store were above the national mean. It was noted above that by 1961 eight firms operating 30 stores were doing over half of the grocery business in the City and County of Honolulu.

The impact of the change in food retailing on the marketing structure for foods is distinctly evident at some points and for some commodities. The conventional food wholesaler of the type that was dominant before World War II has lost ground to direct buying by retailers, to streamlined wholesale firms, and to cooperative-buying groups. Sales agents and brokers have gained in relative position during the past 20 years. Direct buying by retailers has been most apparent where mainland commodities are involved.

Within the State there has developed a reasonably satisfactory adjustment of the marketing procedures for some of the diversified agricultural products in which the evolving channels are compatible with the demands of the present large-scale retailers and also reasonably protective of the producers' interests.

This process is much more advanced for livestock, poultry, and dairy products than it is for fresh produce and other diversified crops. This is evident when it is noted that a \$9 million volume of local beef is handled each year in a market dominated by fewer than five major dealers. At the same time there are over 50 produce dealers in the Honolulu market where the volume of local produce handled (some also sell mainland produce) may total perhaps \$5 million annually.

In those commodity areas where product control was already concentrated at the time the supermarkets and military procurement programs brought an accelerated interest in direct buying, it is not unexpected to find that the adjustment to the new buying techniques has been facilitated and at least partially accomplished. But in the several areas where control of the marketing mechanism has been fragmented for many years the shift toward integration of production and handling up to point of sale to retailers has not moved forward with any degree of rapidity. There is little doubt that further concentration of buying power will occur among purchasers of Hawaii's food products. And as farm units themselves become larger it is reasonable to assume that direct sales by individual producers and by organized groups of farmers will increase. Farmer's organizations may well take the form of bargaining associations.

Large-scale buyers of Hawaii's diversified agricultural products demand that there be regularly available, adequate supplies of such products of specified quality and that the price be at least reasonably competitive. To satisfy these requirements local farmers may in some cases find it advantageous to organize cooperatively in order to gain some of the advantages of both horizontal and vertical integration while at the same time improving their bargaining position in reference to the large-scale buyers. In other cases the adjustment is now being, and likely will continue to be, effected satisfactorily by independent, private dealers. Failure of Hawaii's farmers and wholesale dealers to recognize and meet the need of the large-scale buyers, both commercial and military, for an assured supply of products that meet the buyers' requirements can only result in diversion of more and more business to outside sources of supply.

Over a period of time, even if the bargaining position of Hawaii's producers can be equated with the purchasing power of the buyers in the market, it must be assumed that constantly increasing attention will be given to alternative sources of supply and the relative prices of competitive goods. A large supermarket firm can today bring to Hawaii from the Mainland a refrigerated container of produce or meat that a few years ago no single store could have considered. This factor is certain to have a continuing effect on local prices and trading policies. A side effect is the probability that both farms and market intermediaries in Hawaii will become fewer and larger. This trend is already in progress but the movement has not been uniform in the various commodity fields. Greater efficiency at all levels of the food trade may result. In this setting Hawaii's small, family-type farmers could easily be forced to work together on a cooperative basis in order to survive.

If and when mainland-based food retailers enter on the trading scene in Hawaii there will likely be a further increase in direct shipments to retail outlets in the Islands. This development would have important implications in the handling of some commodities such as fresh fruits and vegetables where wholesalers are currently dominant as receivers of both mainland and local

produce. Another definite prospect is the increased use of private labels by mainland firms operating in Hawaii and a growing competition with local firms featuring nationally advertised brands. Effectiveness of Hawaii's minimum markup law on many food items may be diluted through promotion of private labels.

It appears that local chains of supermarkets in the State have not yet become sufficiently large to justify any extensive action aimed at vertical integration. In very few cases do even the larger retailers have any direct financial interest in or control of firms that supply merchandise to the retailers.

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