

TRENDS IN AGRICULTURAL DEVELOPMENT
IN GUAM AND MICRONESIA

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INTRODUCTION

The climate in Guam and the U. S. Trust Territory of the Pacific Islands (Micronesia) is tropical with very little seasonal change. Daily temperature varies between 70 degrees and 85 degrees F, with an average humidity of 80 percent. Rainfall is variable, ranging from 60 to 90 inches in the Northern section of the Territory, and 160 to 190 inches in the Southern half.

The vegetation in Guam and the Trust Territory is largely tropical in nature and a variety of fruits and vegetables can be grown. Some islands in the Territory have maintained their traditional subsistence economy but in the more populous areas where external influences have been great, commercial farms have been established. Generally, the same plants can be grown in most areas in the Territory but the significance of each varies from place to place depending on soil conditions and production technology.

Agriculture, a basic industry in the islands, remains untapped, and the adoption of better cultural practices by accelerating research in crop and livestock production could be a strong base for economic self-sufficiency, growth and stability. Along with basic research, adequate infrastructure of roads to make accessible fertile farm lands, markets for sale of agricultural products, storage facilities, and irrigation system, a dependable transportation system, both air and surface must be developed. The export of produce from one island to another, from the outlying islands to population centers, and from the Territory to foreign ports is dependent on scheduled transportation of shorter frequency to facilitate marketing of crops and to motivate increased

production. Also, there is a need to provide farm credit and price incentives to orient subsistence farming to greater commercialization.

Regardless of the fluctuations in the world market price for copra, it will continue to be a major source of income to the Trust Territory, with the bulk of the copra exported to Japan. The second largest commodity exported from this area is fish which includes frozen fish by major fishing companies for processing to the United States and Japan.

In 1974, production of agricultural crops for the domestic trade in the Trust Territory increased over the previous years; notably in poultry (145%), meat (94%), and fruit and vegetable (46%). In Guam, increases have not been as dramatic although there has been a steady increase in domestic trade. Improvement and expansion of fruit and vegetable acreage is being encouraged to replace imports of these commodities.

METHODOLOGY

In developing the paper, intensive search was conducted to pinpoint accurate data. In addition to reviewing the literature, serious efforts were made to identify and contact all appropriate government entities for assistance. Much effort was directed toward verifying accuracies of figures made available by these government agencies.

Additionally, an assessment was made to determine future projects and/or programs that these government agencies will be undertaking.

In gathering materials for the paper, the islands were divided into four sub-areas: Guam, Palau and Yap; Saipan, Tinian and Rota; Truk, Ponape, and the Marshall Islands. Each writer agreed to develop a paper on at least one of the four sub-areas.

Presentation of the paper was based on these four sub-areas and comes in the order listed above.

TRENDS IN AGRICULTURAL DEVELOPMENT IN GUAM

Situation

Geography and Climate

The U. S. Territory of Guam is located at latitude 130° 28' N., longitude 144° 45' W., and lies approximately 1,689 miles south of Tokyo and 2,161 miles east of Manila.

The island's total land mass of slightly over 212 square miles is blessed with a tropical climate. Semiannual monthly average rainfalls range from 12.90 inches during the rainy season (May - October) to 8.12 inches during the dry season (November - April). The months of August and October are usually the wettest months while February and March are usually the driest months. Average monthly temperatures range from 75 degrees Fahrenheit during the coolest months of late winter to the mid 80 degrees Fahrenheit in the summer and fall.

Geology and Vegetation

Two geologic provinces dominate Guam and are largely responsible for the resulting soil types found. Except for several volcanic outcrops, the northern half of the island is basically an elevated limestone plateau endowed with porous rock soils and a rich variety of mixed broad-leaved evergreens. In contrast, the southern half is largely comprised of denuded hills dominated by savanna grassland (slopes and ridges) and scattered woodlands and wet volcanic ravine forests laced with streams. Soil profiles in the south are also generally better for growing fruits and vegetables.

Population and Economy

Guam's young (median age below 16 years) multicultural population of nearly 100,000 is concentrated at the central and northern parts of the island. The

Guamanian of today is American, but with ethnic ties that include American, Asian, South Seas, and European influences. The native Chamorro language is widely spoken, although practically everyone is fluent in English.

Rapid growth in recent times have taken place at a rate that is perhaps much faster than the "carrying capacity" of the island's physical, economic, and human resources. While Government of Guam revenues increased from slightly over \$15,000,000 in 1962 to over \$100,000,000 in 1973, most of the dollars are committed to necessary government services and expensive infrastructural developments (utilities, roads, schools, medicine facilities, etc.).

The island is presently experiencing a severe recession period coupled with inflation. Government of Guam deficit at the end of fiscal year 1975 has been estimated to be over \$40,000,000.

Agriculture

In 1974 approximately 3.4 million pounds of fruits and vegetables were produced on the island, an increase of 450,000 pounds from the previous year. However, this only represents 27 percent of the total nonmilitary consumption for the year. Poultry production during the same period was 244,200 pounds which is approximately 1/10 of total consumed. One hundred twenty-eight thousand seven hundred and fifty pounds of beef were produced on island versus 4.6 million pounds imported. Two million pounds of fish were imported as against 201,000 pounds of local fish caught.

Only in the production of egg, where in 1974, 2.4 million dozen eggs were produced on island vs. 618,000 dozens imported, did the island produced more than what it is importing. Overall, local agricultural and fishery products represent approximately 23 percent of what is being consumed marketed on the island.

Trends in Agricultural Development

Past Performance

Before World War II the island of Guam was largely an agrarian society. Production of food was on a self-sustaining basis. The advent of World War II, however, brought a dramatic change to the island's economy and lifestyle.

Guam became an important U. S. military base. The island's civilian government (Government of Guam) was established. High employment opportunities became available in the military bases, Government of Guam offices and private enterprises. Agricultural lands were converted into barracks, bases, and other infrastructures.

Within a span of twenty-five (25) years, Guam's society was transformed from a productive society to a consumptive society.

In the early sixties two major typhoons hit the island which set back considerably the development of the island's once primary industry. Subsequent to the typhoons Guam experienced a phenomenal growth in its economy. This growth can be attributed to two factors: (1) aid from the U. S. government to rebuild the island after the typhoons and (2) the development of the island's tourist industry.

In the ten-year period ending June 30, 1972, business income rose from \$83,000,000 in 1963 to over \$423,000,000 in 1972. Resident personal income increased from about \$43,000,000 in 1962 to well over \$166,000,000 in 1972.

Despite the phenomenal growth in Guam's economy during the last ten years, agriculture as an industry did not obtain the benefit of development enjoyed by other facets of the economy. There has been, however, a definite, steady upswing in domestic agricultural production. The value of locally produced agricultural products has been increasing on the average of approximately

\$200,000 per year. In 1967, the value of local agricultural products was \$1,633,080. In 1970 the value increased by \$937,460. In 1974, the total value of locally produced agricultural products was \$3,542,537.

In recent times there has been a resurgent of interest in the development of Guam's agricultural industry. Agricultural development programs have become high priorities within Government of Guam. A Green Revolution Committee was formed to coordinate and put forth concerted effort of all Government of Guam endeavors relating to agriculture. Committee membership includes the heads of the Departments of Agriculture, Commerce, Land Management, the Guam Economic Development Authority and the University of Guam. A five-year development plan is being developed.

Currently, Government of Guam offers the following programs to encourage agricultural developments:

Land Needs - Government lands are available on a lease basis for farming purposes. Two Government of Guam agencies handle the agriculture land lease program. The Department of Agriculture provides long term leasing of agricultural lands for individual desiring to engage in commercial production of fruits, vegetables, ornamental plants, poultry, livestock and fresh water fish. The maximum term of the lease is 50 years and renewable every 10 years. As an incentive measure the lessee is exempted from paying rent the first five years. Maximum land size area available is 16 acres.

The Department of Land Management issues land use permits making government lands available for home gardening. Under this program, Government land is leased on a yearly basis at \$40 a year per acre lot with maximum size of 4,000 square meters. Approximately 1,300 acres of

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Government land is currently leased out under this program.

Farm Equipment Service and Seedlings - The Department of Agriculture makes available to farmers at nominal charges farm equipment such as bulldozers, tractors and sprayers. The Department also makes available seedlings according to Guam's planting calendar. Minimal charges are collected for seedlings.

Financial Assistance - The Guam Economic Development Authority has two farm loan programs. The Guam Development Fund Act (GDFA) and the Agricultural Development Fund (ADF) make loans readily available for persons interested in farming. A basic requirement is that applicant must be denied a loan from at least two commercial loaning institutions. Minimal interest rates are applied to both of these loans: The GDFA loan can go up to \$500,000 while ADF's ceiling is \$20,000.

The Farmers Marketing Revolving Fund Board was established recently to administer the Farmers Marketing Revolving Fund. The purpose of the fund is to insure that farmers receive much needed cash immediately upon sale of their produce. Fifty thousand dollars have been authorized for this fund. Plans are still being developed for the implementation of the program.

Educational and Research - The College of Agriculture and Life Sciences was established within the University of Guam. The College conducts educational programs through the resident instruction offerings and through the Cooperative Extension Service. Agricultural research is an important feature of the College's mission.

Problem Areas

There are basically six major problem areas that appear to inhibit the development of Guam's agricultural potential. These are:

- a. Geography;
- b. Limited size and diversity of the local labor force;
- c. Inefficient planning and organization in the production and distribution of agricultural goods and services;
- d. Inadequacy of basic infrastructures such as access, irrigation facilities, animal slaughter and processing facilities, storage and grading facilities, etc.;
- e. Land ownership patterns in terms of the availability of cropland to fruit and vegetable growers;
- f. Limited political, administrative, and financial capabilities; and
- g. Increasing negative attitudes toward agriculture due to rapid urbanization, minimal number of formal courses of instruction in agriculture (secondary and higher education) and ineffective agricultural development programs that do not show immediate fruition.

The list of problem areas may appear insurmountable. However, with adequate provisions for manpower training, proper planning, necessary capitals and research and educational programs all with the exception of geography can be overcome. It should be noted that in view of current limited financial resources, Guam must apply imaginative, persistent and complimentary programs.

Potentials

The heavy dependency on imports to meet the local market demands coupled with worldwide shortage of food offers the best argument for the implementation of accelerated agricultural and fishery development programs. As was stated

earlier local agricultural and fishery products represent a mere 23 percent of total civilian food consumption. It has been estimated that sources of imported products were United States - 47 percent, Japan - 24 percent and U. S. Trust Territory - 6 percent.

A five-year plan developed in 1974 by the Guam Department of Agriculture and endorsed by Government of Guam purports to increase the production of fresh fish, fruits and vegetables, poultry meat and pork by as much as 600, 156, 530 and 295 percent respectively of the 1974 production level.

Given the needed support and opportunity for development, it has been estimated that crop, poultry, livestock (primarily pork) and fresh fish industries could blossom initially into a combined business worth of \$12,000,000 per year (current estimate \$3,000,000).

Fruits and Vegetables. Tomatoes, peppers, eggplants, beans, leafy vegetables, cucumbers, watermelons, cantaloupes, bananas, squash, bittermelons, corns and numerous other crops are grown commercially on Guam. A Crop Forecast and Marketing Report was recently initiated to combat fluctuations in production. A \$50,000 marketing revolving fund has been authorized by the Guam Legislature to purchase fruits and vegetables from farmers upon harvest. Government of Guam would then assume the responsibility of selling the crops.

Poultry. The island imports more than 2.3 million pounds of poultry meat amounting to more than \$876,000. Local production is about one-tenth of imported figures. A poultry processing plant is needed to expand and stimulate production in the area. A \$143,000 loan had been approved to start construction of the first processing plant. It is estimated that 60 percent of the island's laying flock are replaceable and available for processing annually which the processing plant can initially utilize.

Pork. It is estimated that the domestic pork output is made up of 90 percent roasting-size pigs and 10 percent slaughter type. The establishment of slaughtering facilities would undoubtedly expand the current production pattern (approximately 437,000 pounds). The bulk of roasting pigs now being produced could be raised to full-size slaughter pigs for better pork consumption.

Fishery: Guam produces annually over 200,000 pounds of fish as compared to nearly 800,000 pounds of imported fish. Fresh-water fishpond pilot projects were initiated by the Department of Agriculture in an attempt to reduce imports of fresh-water fish. These projects were to determine the feasibility of growing commercially fresh-water eels, silver carps, giant prawns, milkfish and tilapia. The projects on the eels and carps have been completed and were apparently successful.

In the next five years, the department intends to work toward developing 25 acres of fishpond producing the above-mentioned species. Additionally, Government of Guam efforts are being expanded toward the development of a tuna industry program.

Discussion

The formation of the Green Revolution Committee is a good indication of Guam's seriousness in the development of a viable agricultural industry. The Committee's all-out effort to develop the island's agricultural industry utilizes the multi-disciplinary and multi-department approach. The need for a coordinated effort is a must for the successful development of Guam's agriculture. Development efforts are multi-disciplinary in nature that no one single department can be expected to successfully cope with it.

A survey of all Government of Guam agriculturally-related services and programs have been conducted. The Green Revolution Committee is currently

reviewing them toward the idea of improving and strengthening these programs and services. Expansion, modification and in some cases consolidation of services and programs can be expected. Initiation of new services is inevitable (a new U. S. Government funded farmers loan program is to be initiated in January, 1976).

The Committee has been identifying limitations, constraints and potentials since its formation in August, 1975. Attempts in overcoming obstacles are being developed. A five year local agricultural production targets to be carried out on a yearly incremental basis have been proposed. Target figures were based on past performance and on the assumption that constraints will be overcome. It has been determined that achieving yearly targets are not as important as achieving the overall production target within the given five year plan.

Production targets^{consideration} involved the building of basic infrastructures such as slaughterhouses, poultry processing plants, fresh-water farms and cold storage and freezing plants. Specificities on most of these facilities such as the "who, when, how and the extent" have yet to be determined, however. Considerable amount of planning and research is still needed in order to maximize optimal utilization of facilities if and when they are built. A group of scientists highly competent in tropical agriculture will be recruited for this short term on site assignment. They will be asked to make recommendations based on Guam's present agriculture including its potentials and shortcomings.

The absence of a Department of Labor representative on the Green Revolution Committee is noteworthy. Labor has been a major problem in Guam's agricultural development. In the past, very few farm laborers were available due to the existence of relatively higher-paying and less-strenuous governmental, commercial

and industrial employment on the island. Importation of foreign labors was initiated. However, in recent times largely because of the economic condition of the island, more local farm laborers have become available. A review of the foreign labor program is needed.

Lastly, agriculture has the potential of becoming a major industry on Guam. But no commercial agricultural industry can long survive in this industrial age without a continuous inflow of scientific information developed through research.

In a young agricultural economy, as illustrated by Guam's in the mid 1970's, a flow of generalized scientific information is not enough. Insofar as possible, information should be pinpointed, suggestive of early payoff, and result largely from indigenous research. Rigorous educational and research programs must continue. If support of agricultural research and educational programs lessen or diminish, Guam can expect (as in the past) its agricultural industry to behave accordingly.

TRENDS IN AGRICULTURAL DEVELOPMENT IN MICRONESIA

The Trust Territory of the Pacific Islands includes virtually all Micronesian islands in the Pacific except the U. S. Territory of Guam, the Republic of the Marshall Islands, and the Gilbert Islands. The Gilbert Islands are administered by Great Britain. Roughly rectangular, the three million square mile area runs north from the equator 1,300 miles with a width of about 2,300 miles.

The Trust Territory has been divided into six administrative districts, namely, Marianas, Marshalls, Palau, Ponape, Truk and Yap. As the agricultural, climatic and cultural factors vary in each of these districts, the agricultural trends in each of these districts were discussed separately.

Micronesia Tables 1 through 2 in the appendix show the agricultural production in the Trust Territory for FY 1974 and FY 1975. Micronesia Tables 3 through 6 provide information on agricultural production for domestic use and for export in different districts and their values.

Marianas

Saipan

Saipan is the second largest island in the Marianas. Arable land areas are limited and a large percentage of the land is kept idle. Suitable land for grazing are very extensive and an increase in beef production should be encouraged. Government cattle herd numbered 100 heads in 1974.

Vegetables are produced solely for the local market. On occasions, when there is a surplus, vegetables are shipped to Guam. Bananas, breadfruits, and citrus are also produced for local consumption. Taro, cassava, sweet potatoes, yams, and corn are staples which are also produced.

The development of a prawn industry along the shoreline should be strongly considered.

Tinian

Tinian the "salad bowl" of the Marianas produces a variety of vegetables under modern irrigation system. Vegetables grown are: head cabbage, Chinese cabbage, green onions, cucumbers, tomatoes, watermelons, cantaloupes, honeydews, bell peppers, and hot peppers. Tinian exports over 80 percent of its vegetables to Guam. Small quantities are shipped to Saipan.

Fruits such as avocados, bananas, and oranges are primarily produced for local consumption. Staples such as yams, sweet potatoes, cassava and taro are also produced.

Tinian has the potential of becoming a leading dairy and beef producing center in the Marianas. It has a ready market in Guam for milk and beef. There are about 3,500 heads of cattle, 3,000 hogs and 700 dairy cows. A modern slaughter house operating in Tinian has the capacity of slaughtering 40-50 heads a day. A milk processing plant will be completed by the end of this year.

A small fishing cooperative has been recently formed and considerable interest is present in developing the fishing industry. The market will be Guam.

Rota

The number of commercial farmers have increased in Rota and there is considerable interest in vegetable production since irrigation water is ample. Head cabbage, head lettuce and Chinese cabbage can be grown in the highlands; while cucumbers, tomatoes, green onions, watermelons, and other greens can be

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cultivated in the lowlands. The major market center for vegetables from Rota is Guam with occasional shipments to Saipan.

With the availability of good grazing land, Rota's dairy and cattle industry can be developed into successful enterprises.

Marshall Islands

The Marshall Islands are dependent on imports for a large portion of its fresh fruits and vegetables and livestock products from Ponape and other East Caroline Islands and from the United States. The Marshalls have the largest copra and cacao production in the Trust Territory.

The improvement and development of refrigeration facilities in the Marshalls are expected to result in an expansion of the fishing industry.

Palau

Palau is the westernmost island group of Micronesia and the largest group of the Caroline Islands. It is located 7° north of the equator with a yearly temperature range of 69 to 91° F. It includes volcanic islands, coral islands and atolls as well as barrier reefs, fringing reefs and shoal reefs. Botanically, Palau is the richest and most diverse group of Micronesia. It is volcanic in origin and is relatively low (242 meters). Koror is the principal town in Palau and Malakal is its seaport. The present population of Palau is 14,000 and is said to have been 45,000 in 1783.

The major crops currently grown in Palau are taro (Colocasia esculenta) tapioca (Manihot esculenta) and sweet potato (Ipomea batatas). Farming is mainly of subsistence nature and very little commercial agriculture is practiced.

Farmers depend on the District Department of Agriculture equipment for plowing and discing operations. Also, they heavily depend on the Department of Agriculture for the necessary supplies like fertilizers and pesticides.

Coconut plantations in Palau are extensively damaged by the coconut rhinoceros beetle, Oryctus rhinocerus. However, Palau has exported 583,988 lbs. of copra to a value of \$79,221.73 during FY 1975.

There are no commercial poultry, hog or cattle farmers in Palau. This situation is mainly due to high cost of imported feed from the foreign countries.

Van Camp Company harvests fish around Palau. However, processing operations are carried out elsewhere.

Each year, June - July is the period of Trocus harvest in Palau. Trocus meat and shells are exported mainly to Japan.

The potentials for agricultural and marine resource development seem to remain high and is yet to be exploited. Micronesia Industrial Corporation has plans for setting up a copra oil mill in Palau which will utilize the copra produced in the Trust Territory and currently exported to Japan. By-product of this industry, namely, the Copra cake could be well utilized to substitute for the imported livestock feed.

Commercial agriculture is yet to start in Palau. People grow taro, tapioca and sweet potato mainly because of little attention is needed in the form of culture, fertilization and pest and disease control. Modernization of farming practices could increase the yields of these crops manifold. Most arable land is located in Babelthaup. The construction of the Koror-Babelthaup bridge and development of an adequate infrastructure of roads should aid in migration of population to Babelthaup and opening up of more land for agriculture.

Ponape

Ponape, the largest island in the East Caroline Islands, has a land area of 340 square miles. Ponape has well grassed table land suitable for pasture cattle, but the livestock industry remains undeveloped. The major commodities produced are copra, cacao, bananas, black peppers, rice, eggs, pork, papayas, leafy greens, cucurbits, mangrove crabs and pelagic and reef fish.

Copra, cacao, and black pepper find their way into the world market. The black pepper is of high quality and large quantities can be produced and exported if properly promoted. Small quantities of black peppers and bananas are shipped to Guam. Also, small quantities of vegetables are also shipped to the other East Caroline Islands.

Commodities which have potential of increased production are rice, bananas, black peppers, papayas, and pelagic and reef fish. Rice is currently imported from the United States. However, a development project in rice production is underway in Ponape and is being established on a commercial scale. Ponape expects to be completely self sufficient in this crop. Effort is made to increase pork production to achieve greater self sufficiency.

The Ponape Community Action Agency encouraged development of inshore fishing for local needs and exports to Guam. Cold storage reefer barges were put into operation in Ponape and is expected to increase the refrigeration capacity for offshore and inshore fisheries to a viable self-supporting level.

Ponape will continue to depend on the United States and Japan for round onions, Irish potatoes, beef, poultry, oranges, apples, lettuce, grapes, celery and other fruits and vegetables. Basic staple commodities like taro, yams, cassava, sweet potatoes, breadfruits are sufficient for local consumption.

Truk

Subsistence economy continues on Truk. Truk is more or less self-sufficient in vegetable crops. Small quantities of green onions, Chinese cabbage, cucumbers and pineapples are exported to Guam. Avocados, oranges, pomelos, and tangerines are produced for home consumption. Crops imported from the U. S. mainland are celery, round onions, rice, potatoes, and celery.

Truk government fishing vessels with larger ice capacity were provided to local fishing groups in the lagoon making it possible for fishing groups to increase their catches. The provision of ice and new cold storage plants have also made it possible for the Trukese fishermen to satisfy the fresh fish requirements of the people of Moen. Export of lobsters and fish was initiated by the fisheries cooperative to the market in Guam.

Yap

Yap consists of a close group of islands with an area of 100 square kilometers and is located about 10° North of the equator. Originally, it consists of three islands but the Germans cut the Tageren Canal and separated Gogil and Tomil from the rest of the main island of Yap. North of Gogil and Tomil is Map Island and to the north of Map is Rumung Island. Yap is volcanic in origin and has the most ancient rocks of Micronesia.

Giant swamp taro (Cyrtosperma chamissonis) is a commonly cultivated crop in Yap. Few acres of pineapple were planted in the Thol village in Tomil. Traditionally farming is done by women in Yap. Few fields of less than an acre each were cropped with a mixture of Chinese cabbage, sweet potatoes, eggplants and onion. Very primitive methods of farming operation are still in

practice and no mechanized or modern equipments were used by the farmers except the tractors used by the local Department of Agriculture for clearing the land.

The only poultry farm in Yap is located in Tomil, which meets about one eighth of the egg requirement of Yap. There are three hog farms with an average of about 25 pigs in each farm.

The absence of coconut beetle is an asset to the Coconut Industry in Yap and it has exported 1,544,452 lbs. of Copra to a value of \$209,839.37 during FY 1975. Yap has also exported Pineapple and the Polynesian chestnut (crataeva speciosa) to a total of 2,499 lbs. for \$462.11 in the same year. Citrus trees are scattered all over the Islands of Yap, however, the presence of citrus rind borer is an impediment for exportation of this crop.

Farmers' Market in Colonia assembles twice a week and the farmers from different villages sell their produce at a price set by the Department of Agriculture in agreement with the farmers.

There is also a Fishermen's Coop with 120 members, which helps them in marketing their fish and assists them in securing their fishing supplies.

The agricultural and marine resources in Yap are abundant and untapped. Plans for the construction of ice and freeze facilities in Colonia and Ulithi are in progress for the eventual development of commercial fishing operations and exportation.

The absence of any significant cropping other than the giant swamp taro cultivation shows that the agriculture has been a completely ignored sector in this island group. With careful planning and cautious introduction of commercial crop of varieties of high yielding and other desirable qualities,

Yap could become an exporter of many agricultural commodities. However, such programs should be planned to fit into the social and cultural background of the people of Yap.

GUAM TRENDS AT A GLANCE

I. Basic Statistical Data

A. Land and Natural Environment

1. Land Area:

Total area: 212.6 square miles

or approximately 136,064 acres (flat surface estimation)

2. Water resource:

One major water Reservoir - Fena lake

Lake Area: When full 196 Acres

Gallon capacity: 2.4 billion or 7,500 Acre ft.

Source: Geological Survey - Naval Station, Guam

Underground water lense -

Gallon capacity - unknown; Provides 60% of water consumed
on the island

B. 1974 Temperature and Rainfall (semiannual average)

<u>Months</u>	<u>Temperature</u>	<u>Rainfall</u>
Rainy Season: May-Oct.	High <u>85.88^o</u> - *Low <u>76.5^o</u>	<u>12.90"</u>
Dry Season: Nov.-April	High <u>84.1^o</u> - *Low <u>75.5^o</u>	<u>8.12"</u>
1974 - Highest Rainfall - Aug.	<u>25.16"</u>	Lowest Rainfall - Feb. <u>3.13"</u>
1973 - Highest Rainfall - Oct.	<u>17.82"</u>	Lowest Rainfall - March <u>1.57"</u>

*Night temperature

C. Size and Composition of Agricultural Sector

	<u>1974</u>
1. Total Population	84,966 (civilians)
2. Agricultural Population	9,941
% of total population	11.69%

3. No. of Ag Labor Force	120 (40 Guam hire; 80 aliens)
4. No. of Farm Families	1,578
5. Cultivated Land (Truck Farming)	1,389 Acres
6. Average Size of Farm	38,332 square feet
7. Average Size of Guam Family (persons)	6.3 (Civilians only)
8. Potential Acreage for Cultivation	10,000+ Acres
9. No. of Hydroponic Operation	6
Area utilized (acres)	5

D. Agricultural Production vs. Population Increase (Decrease)

	<u>1960</u>	<u>1964</u>	<u>1974</u>
1. Agricultural Production*	\$634,466	\$749,176	\$3,542,537
2. Agricultural Population			
Growth rate (%)	12,776	15,932	9,941
3. Ag Production		18.1%	373%
4. Ag Population		24.7%	-37.60%
5. Average share per farm			
family member	\$49.66	\$47.02	\$356.36
6. Average share per farm	\$312.85	\$296.23	\$2,244.95

*Includes fresh fruits, vegetables, eggs and fish - 4 major revenue producing areas in agriculture (figures on pork, beef and poultry not available).

E. Major Agricultural Products vs. Major Agricultural Imports in FY 1974

	<u>Local</u>		<u>Imports</u> (Estimates)	
	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
1. Fruits & Vegetables	3,485,122	798,065	7,681,636	2,304,490
2. Poultry	244,200	104,300	2,570,117	1,156,552

	<u>Pounds</u>	<u>Dollars</u>	<u>Pounds</u>	<u>Dollars</u>
3. Beef	128,750	94,068	4,675,120	374,099
4. Pork	741,300	563,200	2,453,356	1,962,684
5. Eggs	2,436,000*	1,982,904	618,726*	327,926
6. Fresh Fish	201,000	131,000	2,453,356	1,104,010

Note: The dollar value of the imports is based on 1974 market value. ^{3,673,537} ^{7,299,761}

*In dozens.

II. Achievement in Agricultural Development

	1967	1970	1974
A. Value of Ag Products (\$)	\$1,633,080	\$2,570,540	\$3,542,537

III. Changes in Recent Years

	1972	1973	1974
A. Percentage of Employment			
1. Agriculture (Production	.1%	.1%	.31%
2. Industry and Other	55.9%	54.6%	58.5%
3. Government	44.0%	45.3%	41.45%

APPENDIX - GUAM

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P.O. BOX 2950
AGANA, GUAM 96910

SELECTED COMMODITIES: PRODUCTION AND IMPORTS, FY 1968 - 1974

I T E M	Fiscal Year	PRODUCTION		IMPORTS	
		Pounds	Dollars.(U.S.)	Pounds	Dollars.(U.S.)
FRUITS & VEGETABLES..	1968	1,877,872	309,670	14,290,691	1,471,806
	1969	2,230,493	404,919	9,429,495	1,166,960
	1970	2,410,562	430,556	6,524,720*	1,235,686*
	1971	1,819,924	354,973	7,035,599*	1,529,444*
	1972	2,504,308	478,264	6,450,755*	1,465,664*
	1973	3,129,453	622,672	N/A	N/A
	1974	3,485,122	798,065	N/A	N/A
B E E F.....	1968	291,622	184,305	N/A	N/A
	1969	289,539	187,042	1,145,273	796,542
	1970	241,629	157,784	3,070,597	1,651,520
	1971	185,388	124,581	3,391,099	2,458,594
	1972	157,267	106,155	4,220,479	3,049,064
	1973	141,370	94,817	N/A	N/A
	1974	128,750	94,068	N/A	N/A
P O R K.....	1968	536,600	402,450	N/A	N/A
	1969	560,900	420,675	1,005,909	466,023
	1970	411,800	308,850	1,640,852	912,304
	1971	436,909	327,682	1,754,176	898,072
	1972	449,464	336,649	1,671,808	935,636
	1973	538,965	404,323	N/A	N/A
	1974	741,300	563,200	N/A	N/A
POULTRY.....	1968	108,000	38,880	N/A	N/A
	1969	130,560	47,002	1,099,327	374,686
	1970	195,000	70,200	2,249,238	968,316
	1971	160,725	60,272	2,298,120	876,936
	1972	194,780	72,848	2,370,809	877,086
	1973	230,145	95,153	N/A	N/A
	1974	244,200	104,300	N/A	N/A
E G G S**.....	1968	1,056,000	739,200	N/A	N/A
	1969	1,305,000	913,500	723,400	253,194
	1970	2,150,000	1,505,000	328,043	154,577
	1971	1,858,912	1,319,838	179,701	81,702
	1972	2,065,270	1,445,689	429,743	210,718
	1973	2,265,000	1,812,000	N/A	N/A
	1974	3,436,000	1,982,904	N/A	N/A
FISH (Fresh).....	1968	343,500	172,000	N/A	N/A
	1969	326,498	163,250	303,683	92,213
	1970	151,000	98,150	708,855	321,502
	1971	170,577	110,875	472,737	210,709
	1972	143,629	93,359	1,573,228	530,299
	1973	183,000	118,950	N/A	N/A
	1974	201,000	131,000	N/A	N/A

* Does not include imports for military use, estimated at 5 million pounds a year.

** In dozens

N/A Not available

NOTE: The latest Compiled Data on imports by the Department of Commerce is for 1972.

GUAM

TABLE I

FRUITS & VEGETABLES: PRODUCTION TARGETS AND ESTIMATED DEMAND, 1974-79

Year	Domestic ^{2/} (Pounds)	% Increase	Import ^{3/} (Pounds)	Domestic Share ^{2/}	TOTAL ^{1/} (Pounds)
1974	3,451,170	--	7,681,636	31.0%	11,132,806
1975	4,807,000	39.3	6,882,445	41.1%	11,689,445
1976	5,498,822	14.4	6,775,096	44.8%	12,273,918
1977	6,417,124	16.7	6,470,490	49.8%	12,887,614
1978	7,578,624	18.1	5,953,371	56.0%	13,531,995
1979	8,844,256	16.7	5,364,339	62.2%	14,208,595

- ^{1/} Estimated on the basis of a 5% annual increase in demand.
^{2/} Target share and production.
^{3/} Import requirements.

TABLE II

E G G S: PRODUCTION TARGETS AND ESTIMATED DEMAND, 1974-79

Year	Domestic ^{2/} (Dozens)	% Increase	Import ^{3/} (Dozens)	Domestic Share ^{2/}	TOTAL ^{1/} (Dozens)
1974	2,417,028	--	618,726	77.9%	3,098,754
1975	2,956,325	22.3	297,367	90.7%	3,253,692
1976	3,575,000	20.9	-0-	104.6%	3,416,377
1977	3,686,150	3.1	-0-	102.8%	3,587,196
1978	3,870,458	5.0	-0-	102.8%	3,766,556
1979	4,100,000	5.9	-0-	103.7%	3,954,884

- ^{1/} Estimated on the basis of a 5% annual increase in demand.
^{2/} Target share and production.
^{3/} Import requirements.

GUAM

TABLE III

POULTRY: PRODUCTION TARGETS AND ESTIMATED DEMAND, 1974-79

Year	Domestic ^{2/} (Pounds)	% Increase	Import ^{3/} (Pounds)	Domestic Share ^{2/}	TOTAL ^{1/} (Pounds)
1974	254,187	--	2,570,117	8.9%	2,824,304
1975	305,024	20.0	2,660,495	10.3%	2,965,519
1976	457,536	50.0	2,656,259	14.7%	3,113,795
1977	800,688	75.0	2,468,797	24.5%	3,269,485
1978	1,120,368	39.9	2,312,591	32.6%	3,432,959
1979	1,601,375	42.9	2,003,231	44.4%	3,604,607

- ^{1/} Estimated on the basis of a 5% annual increase in demand.
^{2/} Target share and production.
^{3/} Import requirements.

TABLE IV

P O R K: PRODUCTION TARGETS AND ESTIMATED DEMAND, 1974-79

Year	Domestic ^{2/} (Pounds)	% Increase	Import ^{3/} (Pounds)	Domestic Share ^{2/}	TOTAL ^{1/} (Pounds)
1974	750,890	--	2,453,356	23.4%	3,204,246
1975	938,608	25.0	2,425,850	27.9%	3,364,458
1976	1,220,190	30.0	2,312,490	34.5%	3,532,680
1977	1,708,266	40.0	2,001,048	46.1%	3,709,314
1978	2,562,399	50.0	1,332,380	65.8%	3,894,779
1979	2,965,462	15.7	1,124,056	72.5%	4,089,518

- ^{1/} Estimated on the basis of a 5% annual increase in demand.
^{2/} Target share and production.
^{3/} Import requirements.

GUAM

TABLE V

B E E F: PRODUCTION TARGETS AND ESTIMATED DEMAND, 1974-79

Year	Domestic <u>2/</u> (Pounds)	% Increase	Import <u>3/</u> (Pounds)	Domestic Share <u>2/</u>	TOTAL <u>1/</u> (Pounds)
1974	140,400	--	4,675,120	2.9%	4,815,520
1975	187,630	33.6	4,868,666	3.7%	5,056,296
1976	234,000	24.7	5,075,110	4.4%	5,309,110
1977	252,720	8.0	5,321,845	4.5%	5,574,565
1978	277,992	10.0	5,575,301	4.7%	5,853,293
1979	311,351	12.0	5,834,607	5.1%	6,145,958

- 1/ Estimated on the basis of a 5% annual increase in demand.
2/ Target share and production.
3/ Import requirements.

TABLE VI

FRESH FISH: PRODUCTION TARGETS AND ESTIMATED DEMAND, 1974-79

Year	Domestic <u>2/</u> (Pounds)	% Increase	Import <u>3/</u> (Pounds)	Domestic Share <u>2/</u>	TOTAL <u>1/</u> (Pounds)
1974	269,150	--	3,196,707	7.8%	3,465,857
1975	364,000	35.2	3,275,150	10.0%	3,639,150
1976	559,700	53.8	3,261,407	14.6%	3,821,107
1977	827,450	47.8	3,184,712	20.6%	4,012,162
1978	1,294,000	56.4	2,918,770	30.7%	4,212,770
1979	1,880,000	45.3	2,543,408	42.5%	4,423,408

- 1/ Estimated on the basis of a 5% annual increase in demand.
2/ Target share and production.
3/ Import requirements.

GUAM

FRUITS & VEGETABLES: IMPORTS, BY SOURCE, FY 1970 AND FY 1971

SOURCE	1 9 7 0		1 9 7 1	
	Pounds	Dollars	Pounds	Dollars
UNITED STATES	3,744,000	659,157	4,139,314	844,144
JAPAN	1,558,355	430,183	2,111,598	537,247
HONGKONG	25,883	7,250	4,693	4,717
PHILIPPINES	21,019	5,199	10,205	2,589
AUSTRALIA	281,097	20,839	4,441	970
TRUST TERRITORY	554,981	65,515	319,336	43,570
OTHER COUNTRIES	339,385	47,543	446,012	42,107
T O T A L	6,524,720	1,235,686	7,035,599	1,529,444
	<u>PERCENT</u>			
UNITED STATES	57.38	53.34	58.83	55.19
JAPAN	23.88	34.81	30.01	38.66
HONGKONG	0.40	0.59	0.07	0.31
PHILIPPINES	0.32	0.42	0.15	0.17
AUSTRALIA	4.31	1.69	0.06	0.06
TRUST TERRITORY	8.51	5.30	4.54	2.86
OTHER COUNTRIES	5.20	3.85	6.34	2.75
T O T A L	100.00	100.00	100.00	100.00

GUAM

EGGS: IMPORTS, BY SOURCE, FY 1970 AND FY 1971

SOURCE	1 9 7 0		1 9 7 1	
	Dozen	Dollars	Dozen	Dollars
UNITED STATES	60,098	39,665	28,987	19,216
JAPAN	190,097	68,055	43,149	15,454
AUSTRALIA	53,211	23,253	107,565	47,032
PHILIPPINES	2,160	12,958	-	-
TRUST TERRITORY	4,773	2,148	-	-
OTHER COUNTRIES	17,704	8,498	-	-
T O T A L	328,043	154,577	179,701	81,702
		<u>PERCENT</u>		
UNITED STATES	18.32	25.66	16.13	23.52
JAPAN	57.95	44.03	24.01	18.91
AUSTRALIA	16.22	15.04	59.86	57.57
PHILIPPINES	0.66	8.38	-	-
TRUST TERRITORY	1.45	1.39	-	-
OTHER COUNTRIES	5.40	5.50	-	-
T O T A L	100.00	100.00	100.00	100.00

SOURCE: Economic Research Center, Guam Department of Commerce

GUAM

POULTRY: IMPORTS, BY SOURCE, FY 1970 AND FY 1971

SOURCE	1970		1971	
	Pounds	Dollars	Pounds	Dollars
UNITED STATES	2,248,743	967,784	2,298,120	876,936
TRUST TERRITORY	495	532	-	-
TOTAL	2,249,238	968,316	2,298,120	876,936
	<u>PERCENT</u>			
UNITED STATES	99.98	99.95	100.00	100.00
TRUST TERRITORY	0.02	0.05	-	-
TOTAL	100.00	100.00	100.00	100.00

SOURCE: Economic Research Center, Guam Department of Commerce

GUAM

PORK: IMPORTS, BY SOURCE, FY 1970 AND FY 1971

SOURCE	1 9 7 0		1 9 7 1	
	Pounds	Dollars	Pounds	Dollars
UNITED STATES	1,403,391	772,949	1,704,496	871,974
TRUST TERRITORY	91,538	45,544	35,623	13,306
AUSTRALIA	3,111	902	-	-
OTHER COUNTRIES	142,812	92,909	14,057	7,292
T O T A L	1,640,852	912,304	1,754,176	898,072
	<u>PERCENT</u>			
UNITED STATES	85.53	84.72	97.17	97.09
TRUST TERRITORY	5.58	4.99	2.03	2.10
AUSTRALIA	0.19	0.10	-	-
OTHER COUNTRIES	8.70	10.19	0.80	0.81
T O T A L	100.00	100.00	100.00	100.00

SOURCE: Economic Research Center, Guam Department of Commerce

GUAM

BEEF: IMPORTS, BY SOURCE, FY 1970 AND FY 1971

SOURCE	1 9 7 0		1 9 7 1	
	Pounds	Dollars	Pounds	Dollars
UNITED STATES	583,528	487,576	648,685	646,773
AUSTRALIA	166,190	91,337	329,956	171,171
TRUST TERRITORY	38,208	19,073	63,629	33,650
OTHER COUNTRIES	2,282,671	1,053,534	2,348,829	1,606,995
T O T A L	3,070,597	1,651,520	3,391,099	2,458,594
	<u>PERCENT</u>			
UNITED STATES	19.00	29.52	19.13	26.31
AUSTRALIA	5.41	5.53	9.73	6.96
TRUST TERRITORY	1.25	1.16	1.88	1.37
OTHER COUNTRIES	74.34	63.79	69.26	65.36
T O T A L	100.00	100.00	100.00	100.00

SOURCE: Economic Research Center, Guam Department of Commerce

GUAM

FRESH FISH: IMPORTS, BY SOURCE, FY 1970 AND FY 1971

SOURCE	1 9 7 0		1 9 7 1	
	Pounds	Dollars	Pounds	Dollars
UNITED STATES	215,637	112,212	199,614	107,454
JAPAN	109,810	42,004	80,347	28,445
AUSTRALIA	1,783	2,280	16,818	11,923
PHILIPPINES	174,557	82,074	25,102	19,195
TRUST TERRITORY	185,274	75,314	10,480	3,309
OTHER COUNTRIES	21,784	7,618	140,376	40,383
T O T A L	708,855	321,502	472,737	210,709
		<u>PERCENT</u>		
UNITED STATES	30.42	34.90	42.22	51.00
JAPAN	15.49	13.06	17.00	13.50
AUSTRALIA	0.25	0.71	3.56	5.65
PHILIPPINES	24.63	25.53	5.31	9.11
TRUST TERRITORY	26.14	23.43	2.22	1.57
OTHER COUNTRIES	3.07	2.37	29.69	19.16
T O T A L	100.00	100.00	100.00	100.00

SOURCE: Economic Research Center, Guam Department of Commerce

GUAM

FRUITS AND VEGETABLES: TOTAL IMPORTS, BY COMMODITY, FY 1970

S.I.T.C. CODE	DESCRIPTION	POUNDS	DOLLARS
0511	Oranges, tangerines, clementines, fresh	472,119	98,630
0512	Citrus fruits, n.e.c., fresh	182,088	61,536
0513	Bananas, including plantains, fresh	76,185	28,442
0514	Apples, fresh	667,226	93,673
0515	Grapes, fresh	200,864	48,982
0519	Fruits, n.e.c., fresh	644,415	123,341
0536	Fruits, frozen	170,315	43,541
0541	Potaotes, exc. sweet potatoes, fresh	982,487	118,225
0544	Tomatoes, fresh	389,566	131,783
0545	Vegetables, n.e.c., fresh	2,632,518	457,449
0548	Vegetable products, n.e.c., fresh or dry	106,937	30,084
T O T A L		6,524,720	1,235,686

SOURCE: Economic Research Center, Guam Department of Commerce

GUAM

IMPORTS OF FRUITS AND VEGETABLES, FY 1974
(In Pounds)

<u>COMMODITY</u>	<u>JAPAN</u>	<u>MARIANAS ISLANDS</u>	<u>OTHER SOURCES</u>	<u>TOTAL</u>
Apples	57,855	462	-	58,317
Asparagus	1,328	-	-	1,328
Avocados	-	956	-	956
Bananas	-	6,640	25,866	32,506
Beans, Flat	7,234	-	-	7,234
Beans, Sprout	1,203	-	-	1,203
Beans, String	10,836	1,341	-	12,177
Bittermelon	-	30	-	30
Broccoli	2,986	-	-	2,986
Brussel, Sprouts	602	-	-	602
Burdock	4,943	-	-	4,943
Cabbage, Chinese	50,123	3,172	-	53,295
Cabbage, Head	123,456	946	-	124,402
Carrots	39,423	1,000	-	40,423
Cantaloupe	-	126,344	-	126,344
Cauliflower	11,571	-	-	11,571
Celery	73,895	-	-	73,895
Chestnuts	4,924	-	-	4,924
Corn, Sweet	-	100	-	100
Cucumber	83,821	277,455	-	361,276
Eggplant	30,872	8,615	12	39,499
Garlic	21,401	-	5,338	26,739
Ginger	21,659	-	8,616	30,275
Grapes	9,521	-	-	9,521
Grapefruit	107,908	-	-	107,908
Honeydew	-	15,861	-	15,861
Lettuce	164,054	-	669	164,723
Melons	12,120	32,215	-	44,335
Mushroom	6,456	-	-	6,456
Okra	317	1,253	-	1,570
Onions, Dry	30,657	1,161	213,705	245,523
Onions, Green	57,956	8,887	-	66,843
Oranges	57,500	-	-	57,500

MISCELLANEOUS AGRICULTURE STATISTICS, FY 1969 - 1973

ITEM	1969	1970	1971	1972	1973
Number of fruit & vegetable producers (commercial):					
a) Full Time	20	31	39	46	54
b) Part Time	36	42	50	62	80
Acres under cultivation	1,025	1,061	986	1,057	1,389
Number of Acres under Government Leases	677	677	677	677	677
Number of Livestock Producers	135	149	158	171	180
Number of Poultry Producers	56	51	47	36	24
Number of Farm Loans	4	25	9	9	23
Number of Acres of Insured Crops	-	-	13	8	17
Number of Fish Weirs	17	17	17	17	17

GUAM

AGRICULTURAL AND FISHERY PRODUCTION, FY 1964 - 1973

YEAR	FRUITS & VEGETABLES (1,000-lbs.)	POULTRY* (Number)	EGGS (Dozen)	HOGS (Head)	CATTLE (Head)	FISH (Pounds)
1964	630	59,933	792,000	3,500	3,793	334,000
1965	712	59,760	504,000	6,200	5,700	262,000
1966	1,809	54,150	720,000	5,500	6,146	279,000
1967	1,435	60,325	960,000	7,000	6,510	248,000
1968	1,878	72,000	1,056,000	7,600	7,000	343,500
1969	2,230	87,040	1,305,000	7,900	6,950	326,498
1970	2,411	130,000	2,150,000	8,750	5,800	151,000
1971	1,820	107,150	1,858,912	6,699	4,450	170,577
1972	2,504	120,776	2,065,270	8,325	4,112	143,629
1973	3,129	133,235	2,265,000	8,619	3,986	183,000

* Represents only laying chickens.

GUAM

CULTIVATED CROPS RANKED ACCORDING TO
THEIR SHARE IN THE TOTAL ANNUAL
VOLUME OF PRODUCTION

(In Pounds)

C O M M O D I T Y	1969-72 ANNUAL AVERAGE	PERCENT OF ANNUAL AVERAGE PRODUCTION
1. Bananas, eating & cooking	365,720	16.33
2. Watermelons	212,795	9.50
3. Tomatoes	183,027	8.17
4. Cucumbers	160,801	7.18
5. Tangerines	130,143	5.81
6. Melons, (cantaloupes, etc.)	124,025	5.54
7. Beans, green (all types)	111,540	4.98
8. Yams	105,220	4.70
9. Taro, including tips	103,510	4.62
10. Eggplant, long & round	97,284	4.34
11. Potatoes, sweet	55,561	2.48
12. Lemons & limes	55,244	2.47
13. Peppers, hot & sweet	54,555	2.44
14. Corn, sweet & local var.	53,358	2.38
15. Cabbage, Chinese & head	51,828	2.31
16. Oranges	49,379	2.20
17. Papayas	47,733	2.13
18. Okra	41,308	1.84
19. Onions, green	37,135	1.66
20. All other crops	199,800	8.92
T O T A L	2,239,966	100.00

GUAM

PRODUCTION OF SELECTED COMMODITIES,
FY 1974 AND 1975

I T E M S	1 9 7 4		1 9 7 5		Percent Monetary Change, + (-)
	POUNDS	DOLLARS	POUNDS	DOLLARS	
FRUITS & VEGETABLES	3,485,122	798,065	3,750,400	937,600	17.5
BEEF	128,750	94,068	116,230	87,173	(7.0)
POULTRY	244,200	104,300	258,100	116,145	11.4
PORK	741,300	563,200	830,750	656,292	16.5
EGGS *	2,436,000	1,982,904	2,498,620	2,098,840	5.8
FRESH FISH	201,000	131,000	289,017	260,115	98.6
T O T A L		3,673,537		4,156,165	13.0

* In Dozens

APPENDIX - MICRONESIA

MICRONESIA

Table 1. Commercial Agricultural Production in Pounds.

	Domestic		Export	
	FY 1974	FY 1975	FY 1974	FY 1975
Vegetables	459,715	416,863	651,785	1,001,113
Fruit	408,914	317,679	371,500	24,514
Staple Crop	606,790	538,490	77,244	83,566
Pork	124,349	78,612	94,901	2,760
Beef	159,226	85,290	187,566	209,746
Eggs	159,226 doz.	174,370 doz.	--	--
Pepper - Black	--	--	5,635	10,760
Copra	--	--	24,852,000	24,094,224

Table 2. Commercial Agricultural Production Value in Dollars.

	Domestic		Export	
	FY 1974	FY 1975	FY 1974	FY 1975
Vegetables	90,863	133,959	100,085	1154,239
Fruit	41,393	43,881	41,869	4,819
Staple Crop	153,140	140,921	17,600	25,852
Pork	96,437	71,472	70,073	2,983
Beef	48,475	68,752	135,776	167,796
Eggs	168,370	235,893	--	--
Pepper - Black	--	--	4,508	6,456
Copra	--	--	4,404,095	3,273,625

MICRONESIA

Table 3. Commercial Agricultural Products in Pounds Exported during FY 1975.

	Marianas	Marshalls	Palau	Ponape	Truk	Yap
Copra	266,728	12,964,496	583,988	3,133,358	5,601,202	1,544,452
Vegetables	1,001,113	--	--	--	--	--
Fruits	20,771	--	--	1,344	--	2,499
Staple						
Food	83,566	--	--	--	--	--
Pork	2,760	--	--	--	--	--
Beef	209,746	--	--	--	--	--
Pepper - Black	--	--	--	10,760	--	--
TOTAL	1,584,684	12,964,496	583,988	3,145,462	5,601,202	1,546,951

Table 4. Value in Dollars of Commercial Agricultural Products Exported during FY 1975.

	Marianas	Marshalls	Palau	Ponape	Truk	Yap
Copra	36,337.24	1,761,210.34	79,221.73	425,898.63	761,117.85	209,839.2
Vegetables	154,239.88	--	--	--	--	--
Fruits	4,196.77	--	--	160.28	--	452.7
Staple						
Food	25,852.92	--	--	--	--	--
Pork	2,983.15	--	--	--	--	--
Beef	167,796.80	--	--	--	--	--
Pepper - Black	--	--	--	6,456.00	--	--
TOTAL	391,406.76	1,761,210.34	79,221.73	432,514.91	761,117.85	210,301.4

MICRONESIA

Table 5. Domestic Agricultural Production in Pounds during FY 1975.

	Marianas	Marshalls	Palau	Ponape	Truk	Yap
Vegetables	317,829	3,645	33,460	33,627.5	25,534	2,38
Fruits	47,296	30,879	9,094	193,824	27,574	9,12
Staple Crop	52,253	69,267	39,882	258,397	61,177	52,14
Beef	83,960	--	1,330	--	--	--
Pork	16,955	--	47,374	--	--	14,13
Eggs	54,302 dz.	27,091 dz.	28,580 dz.	28,182 dz.	30,507 dz.	5,08
TOTAL	(518,293 (54,302 dz.)	103,791 27,091 dz.	131,140 28,580 dz.	485,848 28,182 dz.	114,285 30,507 dz.	78,517 5,708

Table 6. Value in Dollars of Domestic Agricultural Production during FY 1975.

	Marianas	Marshalls	Palau	Ponape	Truk	Yap
Vegetables	79,799.32	1,059.95	10,106.95	35,263.42	7,161.57	5,31.31
Fruits	11,347.11	5,822.50	5,041.65	13,909.13	6,659.25	1,101.39
Staple Crop	19,925.40	15,893.79	41,998.50	41,320.75	12,488.67	6,291.47
Beef	67,919.28	--	833.60	--	--	--
Pork	13,974.30	--	46,786.40	--	--	10,712.21
Eggs	67,876.40	35,636.25	50,015.00	35,323.70	41,940.45	5,101.51
TOTAL	260,841.81	58,412.49	154,015.10	125,817.00	68,249.94	26,777.91

BUREAU OF PLANNING
GOVERNMENT OF GUAM
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