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THAI ECONOMIC DEVELOPMENT  
IN RELATION TO AGRICULTURE

ORLIN J. SCOVILLE  
ACTING DEPUTY ASSISTANT DIRECTOR  
FOR RURAL AFFAIRS  
USCM, THAILAND

BANGKOK, THAILAND  
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A.I.D.  
Reference Center  
Room 1656 NS

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THAI ECONOMIC DEVELOPMENT IN RELATION TO AGRICULTURE

SUMMARY

- I. Thai Economic Development Depends Heavily upon Agriculture
  - A. Eighty one percent of workers are in Agriculture.
  - B. ~~Eighty~~ percent of value added by manufacturing is from agricultural processing.
  - C. Ninety percent of all exports are agricultural.
  - D. Agricultural output is increasing at a rate about equal to the increase in domestic demand (population growth plus income elasticity for farm products).
  
- II. Agricultural Development has Largely Been the Result of Expansion and Introduction of New Crops Rather than Intensification
  - A. Crop acreage has increased in the last ten years.
  - B. Rice acreage has declined somewhat as higher valued crops have been substituted.
  - C. Capital inputs have been low
  - D. As result of low capital inputs, labor productivity is low.
  
- III. Development Policies of Thailand Emphasize Cheap Rice to Consumers and Cheap Water for Farmers.
  - A. Rice premium shifts more capital out of agriculture than is put in through direct government investment.
  - B. Extensive irrigation schemes are being developed at no charge to water users.
  
- IV. Thailand is at the Stage to Move into Capital Intensive Production, Given Favorable Public Policies.
  - A. Irrigation expansion is well underway.
  - B. Fertilizers should become cheaper.
  - C. Many technological improvements are ready to be tapped.
  - D. Public extension and research services are improving.
  - E. Credit is slowly becoming available to commercial farmers.
  
- V. Expansion Prospects are Potentially Good, but Depend Heavily on Government Policies.
  - A. Rice - with present Government policies, it is doubtful if increase will keep up with population growth.
  - B. Corn and Sorghum - with a growing market in Japan, output will conti to increase - and markedly if fertilizer cost is reduced.
  - C. Cotton - if difficult technological, marketing and farm management problems are solved, expansion could be substantial.
  - D. Livestock - health growth should be obtainable to meet expanding domestic demand for eggs, poultry, pork and, to a lesser extent, beef. Dairy output will continue to be insignificant.

VI. Thai Economic Development has been Accompanied by Growth in Imports from the U.S.

- A. The United States was the fourth most important importer from Thailand and the second most important exporter to Thailand in 1962.
- B. In 1962 U.S. exports to Thailand were 175% of imports from Thailand. In 1955 the situation was about the reverse.
- C. Excluding rubber, Thai and U.S. trade in agricultural products is about in balance.
- D. From 1956 to 1962, Thai exports to the U.S. dropped by 60 percent, (largely because of a decline in rubber exports) while imports from the U.S. rose by 40 percent.

THAI ECONOMIC DEVELOPMENT IN RELATION TO AGRICULTURE

A. Agriculture is a Major Contributor to Economic Development.

1. Agriculture employs 81 percent of the labor force.
2. ~~Seventy~~ percent of value added by manufacture in 1962 was from agricultural processing.

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<u>Activity</u>	<u>Value 1962</u> (Mil. Dollars)
All manufacturing	366
Agricultural processing	239
Rice Mills	75
Tobacco Mfg. and Curing	45
Slaughtering	30
Distilling	27
Shoes, Leather and tanning	16
Rubber Manufacture	12
Weaving and dyeing	11
Soap and Oil Extraction	11
Saw Mills	10

3. Agriculture is the major source of foreign exchange. Ninety percent of all exports are agricultural.

	<u>Value 1961</u> (Mil. Dollars)
All Exports	485
Agricultural Exports	436
Rice	181
Rubber	106
Kenaf	31
Corn	29
Cassava	22

4. Agricultural output growth exceeds rate of population increase.

	<u>1951</u>	<u>1962</u>
Agriculture Production, Value \$Mil.	706	1,111
Agriculture Production, Value Index	100	158
Population, Million	20	28
Population, Index	100	140

5. Volume of agricultural production at constant prices has expanded two-thirds as rapidly as non-agricultural production.

Index of GNP at 1956 Constant Prices

	<u>1951</u>	<u>1961</u>	<u>1962</u>
Agriculture	100	152	151
Total GNP	100	170	177

6. However, at current prices the share of GNP from agriculture has been falling sharply.

	<u>1951</u>	<u>1961</u>	<u>1962</u>
Agriculture Production, \$ Mil.	706	1,085	1,111
Agriculture Productio Index	100	154	158
GNP \$ Mil.	1,411	2,855	3,072
GNP Index	100	202	218
Percent of GNP from Agriculture	50	38	36

B. Characteristics of Agricultural Development.

1. Principal expansion of recent years has been from increased acreage of crops other than rice and expansion of irrigation.

a) Cultivated area:

	<u>Rice</u> (000 a.)	<u>Rubber</u> (000 a.)	<u>Other</u> <u>Crops</u> (000 a.)	<u>Total</u> (000 a.)
1951	14,712	805	1,161	16,678
1956	14,871	837	1,571	17,279
1961	14,565	1,027	3,545	19,229

- b) Rice has the lowest farm value per acre of any major crop so expansion of other crops boosts average output per acre and per man.

<u>Crop</u>	<u>Average Value Per Acre</u> <u>1960-62</u>
Tobacco, local varieties	\$305
Cassava (flour equivalent)	113
Peanuts	98
Kenaf	76
Corn	42
Rice	27

- c) Irrigated crop area has expanded:

	<u>Acres Irrigated</u> (000 acres)
1950	1,485
1955	3,151
1959	3,800
1961	4,000
1962	4,282

- d) Yields per acre have been variable and unimpressive for most crops, with the exception of corn yields which have rapidly increased during the last ten years.

	<u>1951</u>	<u>1956</u>	<u>1961</u>	<u>1962</u>
Corn, bu. per acre	16.0	22.1	31.5	32.5
Rice, bu. per acre	25.0	28.1	27.1	29.2
Kenaf, T. per acre	.647	.432	.555	.528

2. Development is occurring with low capital inputs.

- a) There was one farm tractor for each 600 farms in 1961.  
 b) Fertilizer importation.

Year	1951	1962	1963
Tons	54,769	66,467	98,620
Lbs. per crop acre	6.2	7.9	-

- c) Public investment in agriculture is modest, about \$45 million in 1963 or 9 percent of the national budget or 1-1/2 percent of the GNP, including investment in state enterprises, but excluding loans and investment in roads.  
 d) But the rice premium and tax of about \$50 per ton lowers farm prices and transfers \$100 million of income from farmers to consumers or to the Government.  
 e) A primitive credit system impedes the flow of private funds into farm production.

3. As a result of low capital input, labor productivity is low and costs are high.

- a) Value added per person engaged in agriculture is about \$100 per year, compared with \$2,000 in the U.S.  
 b) Typical rice farmer has 100 days' farm employment per year.  
 c) Yields are low.

	<u>Thailand</u> (1955-1960 ave.)	<u>Japan</u>	<u>U.S.</u>
Corn bu. per acre	30	-	48.5
Rice (paddy) lb/acre	1,201	3,185.6	3,222.2

- d) Feed efficiency is low. Time required to produce a 200-lb. hog is about nine months, compared with five months in the United States. Feed to produce a pound of live weight is about 10 pounds, compared with five pounds in U.S.

## C. Development Policies

### 1. Price Policies

The dominant feature of Thai price policy is the maintenance of cheap rice prices through the rice export premium and tax in force since 1954 and now about \$50 a ton of milled rice.

The few price supports on farm products are insignificant.

### 2. Land Policy

- a) Farms largely occupier-owned, no major land reform problem. Tenancy, however, is increasing on the Central Plain rice farms.
- b) Government has been tolerant of shifting cultivators and squatters in the 60 percent of the land area that is in public forest area.
- c) Irrigation development at no direct cost to the cultivator is the outstanding government contribution to farmers. The annual appropriation to the Royal Irrigation Department is about ~~1/2~~ 2 times the appropriation of the entire Ministry of Agriculture.

### 3. Research and Extension

Institutions are being built, but important major contributions to production are largely in the future.

### 4. Credit and Marketing Policy

#### a) Cooperatives

Thailand has had a public program to encourage cooperatives since 1916. There are about 10,000 small credit cooperatives averaging 18 members each. Total loans outstanding are about \$15,000,000 but mostly consumer credit. Cooperative marketing has been tried on a small scale with little success.

There is no effective national credit or marketing institution to serve farmers.

#### b) Marketing Institutions

The handling of major export crops is regulated by the Government, through quotas or licenses. A start has been made to establish grades for some export crops, such as rice, cassava and kapok.

There is virtually no market or outlook information supplied by the government.

### 5. Transportation Policy

Transport for products has been traditionally provided by canals and the railroads. Highway construction has been largely planned to complement

rail traffic until recently. In the last few years, there has been a substantial expansion in a national highways network and cheap truck transport is expanding rapidly. The growth of highways has been an important factor in new land settlement and agricultural expansion.

## 6. Malaria Control

The nation-wide program to eradicate malaria has been an important factor in permitting the opening of new lands to settlement.

### D. Potential Agricultural Development

#### 1. General

In general, Thailand is about at the stage to progress from extension of land area and introduction of new crops to intensification in use of capital.

##### a) Irrigation

- i. Potential for 1.5 million more acres in the next few years. The Mekong River Project would increase this total by  $2\frac{1}{2}$  million acres. Irrigation can be improved on another 1.4 million acres.
- ii. Substantial potential for double cropping through irrigation.

##### b) Fertilizer

- i. Cost-Price ratio is unfavorable.

###### Rice:

###### Taiwan

1 lb. ammonium sulphate is worth 1 lb. rice

###### Thailand

1 lb. ammonium sulphate is worth  $2\frac{1}{2}$  lbs. rice

###### Corn:

U.S. and Thai farm prices are about the same but a pound of nitrogen costs four times as much in Thailand.

- ii. But, if fertilizer price can be reduced, a big increase in use would be feasible.
- iii. A nitrogen plant now being built at Mae Moh will reduce the price to some extent. So will improved efficiency in distribution.

- c) The advantages of better technology are largely untapped.
  - i. Corn seed selection has increased yields three percent a year, but the new synthetic hybrids are expected to give a boost of 25 percent in a year.
  - ii. Pest controls are used on a very small part of cultivated acreage. It could have a large potential contribution.
- d) Scope of public extension and research service are being expanded.
- e) A small but growing class of commercial farmers could use credit.

## 2. Prospects for Major Products

### a) Rice

Present rate of increase in output is somewhat less than growth in population. With present cheap rice policy, it will be difficult to expand output to keep up with population gains. At higher prices, which would make double cropping and increased fertilization economic, output could substantially exceed the projected population increase.

### b) Corn

Recent phenomenal increases have been largely on new lands that permit moderate yields without utilization of fertilizer. With soil depletion and increased cultivation of marginal land, yields and production will fall off unless substantial amounts of fertilizers are used.

Corn breeding work is opening up a potential for much higher yields. If fertilizer costs can be reduced, output could be doubled or more.

### c) Sorghum

Very little now grown, but satisfactory yields can be obtained. A market has been lacking but it appears that Japan may buy a considerable amount of Thai sorghum.

### d) Cassava

Output increases have been rapid. Crop is a heavy feeder and at present prices fertilizer does not pay. Production, however, is more likely to be limited by market than by resources as EGM trade policies are expected to affect Thai cassava adversely.

### e) Kenaf

Much of rapid expansion in area has been on slash and burn patches in Northeast. Longer term expansion or even maintenance of output will depend upon development of a permanent agriculture. This will be difficult to accomplish.

Price variations are great because of wide fluctuations in production. Thailand has potential capacity to produce all its gunny bags and has surplus kenaf to export.

f) Cotton

Cotton production of about 27,000 bales is mostly based on native strains and primitive cultural and marketing methods. Expansion has been slow. Potential is great, but will be realized only if bold changes are made in breeding, pest control, cultural practices, farm management and marketing. With pest control and moderate fertilization, yields of 980 lbs. of lint cotton have been obtained experimentally compared with the present average yields of about 150 lbs.

g) Rubber

Past production increases have been achieved through an increase in per acre yield and expansion of tappable area. Yields per acre are much lower than Malaysia's because of poor varieties and management practices. Substantial increases are possible on present acreage.

h) Sugar Cane

Yields are low and refineries are inefficient. Expansion has been substantiated through subsidy. With normal world prices it will be difficult to maintain present output.

i) Livestock

There are good prospects for expansion in pigs and poultry to meet moderate growth in the domestic market. Expansion in beef cattle production based on the extension and improvement of native grasslands appears feasible.

A serious effort is being made to increase dairying, but progress will be slow because of diseases and high production costs.

Thailand could expand its modest export market for pork, eggs, beef and poultry, with improvements in quality, marketing and management.

These products go largely to Hong Kong, Singapore, Malaysia and Japan.

E. Relation of Economic Development in Thailand to U.S. Trade

1. The U.S. is the fourth most important market for Thai products and the second most important exporter to Thailand.
2. Thai exports to the U.S. in 1962 were:

	<u>Millions</u>	
Total	\$39	
<u>Agricultural</u>	34	(87%)
Rubber	\$23	
Tapioca	5	
Kapok	3	
Jute	2	
All others	1	

3. U. S. exports to Thailand in 1962 were:

	<u>Millions</u>	
Total	\$71	
<u>Agricultural</u>	\$10	(14%)
Tobacco	\$5	
Cotton	3	
Misc.	2	

4. Thailand's economic development has made it a better customer of the United States for farm and industrial products although it has exported less to us.

	<u>1956</u>	<u>1961</u>	<u>1962</u>
Exports to U.S.	\$Mil.	\$Mil.	\$Mil.
Total	96	37	39
Agricultural	81	33	34
Rubber	(76)	(22)	(23)
Imports from U.S.			
Total	51	63	71
Agricultural	8	15	10

Table 1.  
Gross National Product at Constant (1956) Prices,  
by Industrial Origin - Thailand.  
(1951 = 100)

Industrial Origin	1951		1956		1961		1962	
	\$ (Mil.)	Index	\$ (Mil.)	Index	\$ (Mil.)	Index	\$ * (Mil.)	Index
G.N.P. total	1,560.7	100	2,046.4	131	2,646.3	170	2,761.4	177
Agriculture	686.6	100	814.4	118	1,044.5	152	1,034.0	151
Mining and Quarrying	27.9	100	33.2	110	42.5	150	49.0	176
Manufacturing	197.4	100	246.3	124	296.5	150	330.4	167
Construction	46.2	100	78.2	160	161.8	350	163.3	354
Electricity and Water Supply	2.1	100	4.5	209	8.6	400	10.2	482
Communication and Transportation	60.1	100	106.7	177	208.1	346	227.7	379
Wholesale and Retail Trade	296.3	100	401.4	130	463.7	156	498.3	168
Banking, Insurance and Real Estate	78.2	100	93.5	119	129.3	160	134.1	171
Services	165.1	100	233.1	130	297.8	180	314.1	190

\* Data for 1962 is adjusted to reflect new price deflators.

Source: National Income, 1962, Office of the National Economic Development Board, Bangkok, Thailand.

Table 2. Major Agricultural Exports - Thailand

<u>Commodity</u>		<u>1951</u>	<u>1956</u>	<u>1961</u>	<u>1962</u>
Rice and Rice Products <u>/1</u>	tons	1,474,374	1,264,986	1,575,998	1,271,023
	value (\$1,000)	91,177.7	143,032.3	179,909.9	161,993.4
Rubber <u>/2</u>	tons	111,498	136,225	184,598	194,180
	value (\$1,000)	73,457.3	76,321.3	106,502.4	105,532.4
Kenaf and Jute	tons	1,890	5,859	143,477	237,898
	value (\$1,000)	216.9	932.3	31,322.6	28,951
Maize	tons	22,562	81,490	567,236	472,405
	value (\$1,000)	1,065.4	4,806.7	29,862.8	25,112.7
Cassava <u>/3</u>	tons	23,910	86,978	434,969	400,788
	value (\$1,000)	1,006	5,738.6	21,972.8	21,134.5
Teak	cu. meters	100,845	91,925	64,528	39,753
	value (\$1,000)	7,904.7	15,280.9	12,607.8	5,355.1
Kapok seed and wadding	tons	2,584	7,050	30,769	43,796
	value (\$1,000)	593.1	1,990.4	5,270.5	9,646.3
Buffalo	head	6	40,958	68,872	61,591
	value (\$1,000)	0.3	3,335.3	5,973.5	5,121.4
Eggs <u>/4</u>	tons	20	92	16,259	4,973
	value (\$1,000)	11.1	2,884	6,563.7	2,088.8

/1 Rice and Rice Products = white rice; Glutinous rice; Rice, cargo; Parboiled; Rice n.e.s.; White rice, flour; Glutinous rice, flour; Vermicelli.

/2 Rubber include sheets, latex and waste and block.

/3 Include Cassava root, flour, waste, Sago flour and pearl.

/4 Eggs both for hatching and for food.

Table 3. Major Agricultural Imports - Thailand

<u>Commodity</u>		<u>1951</u>	<u>1956</u>	<u>1961</u>	<u>1962</u>
Cotton fabrics <u>/1</u>	1,000 yd. <sup>2</sup>	<u>/2</u>	<u>/2</u>	169,937	147,956
	value (\$1,000)	16,825.2	35,127.8	38,395.1	31,270
Dairy products	tons	21,352	38,819.	52,692 <u>/3</u>	61,244
	value (\$1,000)	6,271.5	14,520	20,484.5	22,725.8
Synthetic fabrics	1,000 yd. <sup>2</sup>	-	<u>/2</u>	26,413	40,366
	value (\$1,000)	-	8,777.9	10,566	13,678.7
Gunny bags	bale	64,952	33,011	50,518	61,654
	value (\$1,000)	13,147	43,239	6,846.7	9,819.7
Tobacco <u>/4</u>	tons	3,085	4,300	5,783	3,918
	value (\$1,000)	3,256.9	7,344.8	9,181.7	6,458.5
Cotton yarn <u>/5</u> and thread	tons	1,305	5,146	4,374	4,217
	value (\$1,000)	1,576.6	6,757.7	6,705.2	6,257.3
Wheat flour	tons	12,860	26,496	25,384	26,452
	value (\$1,000)	2,684.	3,566	3,863.2	3,063
Coffee	tons	1,813	3,431	5,055	5,433
	value (\$1,000)	1,488.7	2,495.6	3,154.2	2,403.5

/1 Cotton fabrics = grey + others.

/2 Data not available.

/3 Excludes small amount

/4 Leaf or manufactured and manufactured.

/5 Cotton yarn and thread = grey + others.

Table 4. Exports, Imports and Trade Balance - Thailand

1951 = 100

<u>Year</u>	<u>Total Exports</u>		<u>Total Imports</u>		<u>Balance of Trade</u>
	<u>Value</u> (\$1,000)	<u>Index</u>	<u>Value</u> (\$1,000)	<u>Index</u>	<u>(\$1,000)</u>
1951	220,645.5	100	185,244.7	100	+35,400.8
1956	346,159.9	156	382,756.4	206	-36,596.5
1961	499,849.2	226	514,363.6	277	-14,514.4
1962	476,458.6	215	575,182.8	310	-98,724.7

Table 5. 1960-62 Averages of Yield, Wholesale Price, and Value  
For Selected Agricultural Crops

	<u>Yield</u>		<u>Wholesale Price</u>		<u>Value</u>	
	<u>kg/rai</u>	<u>lb/acre</u>	<u>Ø/kg.</u>	<u>\$/lb.</u>	<u>Ø/rai</u>	<u>\$/acre</u>
Tobacco /1	212.33	1,167.07	12.40	.28	2,544.33	305.04
Tobacco /2	93.00	511.50	13.73	.31	1,277.00	159.63
Chili	190.33	1,046.83	7.07	.16	1,338.33	167.89
Cassava flour	659.00	3,624.50	1.60	.04	905.00	113.13
Rubber	80.00	440.00	10.40	.24	834.67	104.33
Peanuts	210.00	1,155.00	3.70	.08	780.67	97.58
Kenaf	200.67	1,103.67	3.04	.07	611.67	76.46
Sugar cane	5,233.33	28,783.33	0.11	.002	592.25	74.04
Castor	176.67	971.67	2.86	.06	529.00	66.13
Cotton	128.33	705.83	7.07	.16	503.00	62.88
Mung bean	181.00	995.50	2.36	.05	424.00	53.00
Maize	319.33	1,756.33	1.04	.02	334.33	41.79
Rice	227.00	810.83	0.98	.02	222.00	26.75

/1 Local Tobacco

/2 Virginia Tobacco, 1962 only.

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Table 6. U. S. Thai Trade - All Products, All Agricultural, and Major Agricultural Products - 1956, 1961 and 1962

Exports to the U.S.

		1956		1961		1962			
		Unit (000's)	\$ (000's)	Unit (000's)	\$ (000's)	Unit (000's)	\$ (000's)		
All Products			96,496		37,468		39,143		
All Agri. Products			80,937		33,415		33,541		
Major	Rubber	Lbs. 249,867	76,394	Rubber	Lbs. 91,758	21,897	Rubber	Lbs. 97,396	23,006
Agri. Prod.	Tapioca, flour & cassava	Lbs. 79,352	3,381	Tapioca, flour & cassava	Lbs. 244,794	8,453	Tapioca, flour & cassava	Lbs. 129,724	4,684
	Kapok	Ton 1	891	Kapok	Ton 8	2,563	Kapok	Ton 10	2,956
	Feathers	Lbs. 141	65	Vegetable pre-preparations.	Ton 1	378	Jute and Jute butts.	Ton 22	2,429
	Vegetable pre-preparations.	<u>1/</u>	46	Other agri. prod.		124	Beans, dry ripe	Lbs. 1,946	170
	Jute & Jute butts	Ton 3	44				Feathers	Lbs. 258	163
	Other agri. prod.		116				Other agri. prod.		133

Import from the U.S.

All Products			51,314		62,506		71,040		
All Agri. Products			7,583		14,928		10,222		
<u>Eight Major Agri. Prod.</u>									
	Tobacco	Lbs. 8,793	6,453	Tobacco	Lbs. 13,580	9,190	Tobacco	Lbs. 7,677	5,315
	Infant & Dietetic foods.	Lbs. 368	245	Cotton	R.ble 33	4,048	Cotton	R.ble 27	3,312
	Other dairy prod.	<u>1/</u>	151	Milk products	Lbs. 1,158	309	Flavoring syrup	Gal. 63	307
	Flavoring syrups	<u>1/</u>	143	Flavoring syrup	Gal. 47	277	Milk products	Lbs. 1,290	239
	Fruits & preparations.	<u>1/</u>	128	Infant & Dietetic foods.	Lbs. 309	202	Infant & Dietetic foods.	Lbs. 197	140
	Tallow, inedible	Lbs. 1,414	125	Wheat flour	Cwt. 29	142	Coffee	Lbs. 89	138
	Vegetables & preparations.	<u>1/</u>	80	Coffee	Lbs. 87	133	Vegetables, canned	Lbs. 503	108
	Other agri. prod.		258	Other agri. prod.		538	Other agri. prod.		665

1/ Preliminary

Source: USDA Annual Trade Statistics 1956-1962

Table 7. Notes on Nutrition in Thailand<sup>\*</sup>

1. Total Caloric intake is 100 calories below estimated average requirement of 1,871 calories.
2. Thiamine - considerable deficit among civilians but no evidence of beri beri. May contribute to infant mortality.  
  
No deficiency in Thai Army because of policy of using undermilled rice.
3. Riboflavin - General deficit but clinical significance is not clear.
4. Niacin - Adequate.
5. Anemia - Prevalent. Intestinal parasites are a probable factor.
6. Vitamin A - Deficit probable.
7. Vitamin C - Mostly adequate.
8. Protein malnutrition limited to infants and small children.
9. Fat - Low.
10. Iodine - Inadequate. Considerable goitre.
11. Calcium Intake - Marginal but no evidence of rickets.

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\* From Nutrition Survey, 1960. The Interdepartmental Committee on Nutrition for National Defense, February 1962.

Table 8. Household Expenditure Bangkok and Dhonburi, 1962<sup>/1</sup>

Per family average annual total expenditure		\$816
" " " " saving		45
" " " " unaccounted for		<u>4</u>
Total annual family income	... ..	<u>\$865</u>
Per capita income	... ..	\$158

Table 9. Weekly Food Expenditure, per Household (5.5 ~~6.26~~ persons)  
Bangkok and Dhonburi, 1962 /1

Pork	...	\$1.01
Beef	...	.20
Fish	...	.89
Poultry	...	.37
Eggs	...	.37
Rice	...	1.26
Fruits & Vegetables	...	1.08
Sugar and condiments	...	.36
Dairy products, fats & oil	...	.27
Sub-total	...	(5.81)
Meals out	...	2.25
Prepared foods & beverages (non-alcoholic)	...	.90
<u>Total food</u>		<u>\$8.96</u> =====

<sup>/1</sup> National Statistical Office Household Expenditure Survey, 1963

Table 10. Data on Thai Agriculture

- 2. No. of farms - 3.5 million
- b. Farm population - 22.74 million (81%)
- c. Persons working on farms - 12.02 million
- d. Average farm size - 10 acres
- e. Tenancy - 13%

Table 11. Land Use - 1961

<u>Use</u>	<u>Area 1,000 acre</u>	<u>Percent of total</u>
Rice	15,485	12.00
Upland crops	3,602	2.82
Tree crops	2,483	1.93
Woodlands	2,139	1.66
Other land in farms	2,036	1.58
Forest and swamp	66,577	51.85
Unclassified	36,066	28.00
	<u>128,388</u>	<u>100%</u>

