

Country Development Strategy Statement

FY 1987

Thailand



JANUARY, 1985

Agency for International Development
Washington, D.C. 20523

BEST AVAILABLE

THAILAND

FY 1987

COUNTRY DEVELOPMENT STRATEGY STATEMENT

USAID/THAILAND
JANUARY 1985

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FY 1987 CDSS: THAILAND

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LIST OF ACRONYMS

ABS	Annual Budget Submission
ADB	Asian Development Bank
AID	Agency for International Development
CDSS	Country Development Strategy Statement
CY	Calendar Year
DA	Development Assistance
EPD	Emerging Problems of Development
ESF	Economic Support Fund
FY	Fiscal Year
G/L	Grant/Loan
IBRD	International Bank for Reconstruction and Development (World Bank)
IDA	International Development Agency (World Bank)
MIC	Middle Income Country
NESDB	National Economic and Social Development Board
ODA	Official Development Assistance
PID	Project Identification Document
PP	Project Paper
PVO	Private and Voluntary Organization
RTG	Royal Thai Government

EXECUTIVE SUMMARY

For the first time in its history Thailand is obliged to fundamentally reconsider directions for national development as it enters a new semi-industrialized era. AID/Thailand is also inescapably at a crossroads. For the first time in our 35-year history of cooperation with Thailand we find ourselves a comparatively minor donor requiring a new mandate now that the Kingdom has developed into a nascent "middle-income" country.

Part I of this CDSS (Analysis) characterizes Thai development as remarkably successful in attaining social and economic progress. Paradoxically, this very progress has also set the stage for a range of emerging problems (overdevelopment of Bangkok, structural poverty, unemployment, lack of undeveloped land, natural resource degradation, etc.) which, if not dealt with in their early stages, could prove seriously detrimental to the nation's development and stability. As a generalization, we conclude that the maintenance of broad-based rural growth and development will be essential throughout the 1980's. Rural development will require careful analysis along with phased structural and policy change, as well as substantial financial resources.

Part II (Strategy) draws on Part I and lays out what we believe are the major determinants of a "middle income country strategy" for AID in Thailand during the period FY 1986-88. Simply stated the CDSS strategy contains these key elements:

- A basic strategic objective of establishing a redefined, more mature, collaborative relationship between the U.S. and Thailand in the area of development cooperation which is consistent with Thailand's status as an emerging middle income country.
- A loan program for the CDSS period which consolidates loan resources on the single theme of employment, with major loan programs initiated for Scientific and Technological Modernization and Support of Rural Industries Development. This approach coincides with Thai development concerns, is in areas where loan assistance is an acceptable funding mode, and is consistent with our analysis of Thailand's priority needs. The forthcoming 6th National Economic and Social Development Plan (1987-91) will have employment as its central concern. It will assign high priority to promoting rural industries as a means to stimulate employment, and to the important supporting role that science and technology will play in the overall process.
- A flexible, jointly managed grant program which is designed to provide responsive and timely funding directed toward key development problems.

- A grant fund for U.S. and Thai private and voluntary organizations (PVOs) to strengthen the role of private initiative in national development.
- A greater and more integrated use of centrally-funded projects in a manner which fits better strategically with Mission priorities and management capabilities.

Finally, Part III (Resources) and Part IV (Work Plan) provide greater development of the requirements and operational thinking of "how" to successfully implement a middle income strategy.

PART I - ANALYSIS

A. Thailand's Growth and Development

1. Comparative analysis of Thailand's performance

In order to develop a better perspective on the relative status of Thailand's development, the Mission compared Thai performance on 72 development criteria with that of a) the dozen AID recipient countries with equal or higher GNP/capita in 1981 (all roughly categorized as "Middle-Income Countries"¹), and b) the forty-three AID worldwide recipients with populations greater than one million. An abbreviated list of key results is noted in Table 1.

These statistics demonstrate that Thailand ranks generally at the high end of the scale for most criteria, both for MIC's and AID recipients in general. Comparatively, some of the country's salient characteristics are: Thailand possesses one of the largest and fastest-growing economies among AID recipients; public consumption is relatively small as a proportion of GDP; investment rates are relatively high; net direct private foreign investment and inflows of medium and long-term public or publicly guaranteed loans are among the highest of any AID recipient; debt service ratios are relatively low and reserves relatively high; it is one of the most populated AID recipient countries,

¹There is no internationally recognized definition of the term "Middle-Income Country". However, AID has often utilized the IBRD per capita GNP eligibility criterion for IDA (\$730 in 1980, \$795 in 1981) as one quantifiable indicator. Official IBRD statistics show Thailand's GNP per capita at \$670 in 1980 and \$770 in 1981, or nearly the IDA threshold.

TABLE 1: THAILAND'S DEVELOPMENT PERFORMANCE COMPARED TO OTHER USAID RECIPIENT COUNTRIES

Source: IBRD World Development Report 1984

Indicator	Time Period	Value for Thailand	Rank Thailand vs. USAID Recipients with 1982 GNP/Cap. \$790	Rank Thailand vs. All USAID Recipients
-GNP per capita (\$)	1982	\$790	13th of 13	13th of 43
-Avg.an.growth of GNP p.c.	1960-82	4.5%	2nd of 13	4th of 43
-Size of GDP (\$)	1982	\$36.8 billion	2nd of 13	4th of 43
-Avg.an.growth rate of GDP	1970-82	7.1%	2nd of 13	4th of 43
-Avg.an.growth rate of agric.	1970-82	4.4%	2nd of 13	3rd of 39
-Avg.an.growth rate of indust.	1970-82	9.3%	4th of 13	8th of 40
-Avg.an.growth rate of services	1970-82	7.4%	2nd of 13	5th of 39
-Avg. an. rate of inflation	1970-82	9.7%	[R] 4th of 13	14th of 43
-Public consumption as % of GDP	1982	13.0%	8th of 12	21th of 38
-Avg.an.growth rate of pub.consump.	1970-82	9.1%	3rd of 12	7th of 34
-Private Consumpt. as % of GDP	1982	66.0%	8th of 13	33rd of 42
-Av.an.growth rate of prv.consump.	1970-82	6.1%	2nd of 13	6th of 38
-Gross dom. invt. as % of GDP	1982	21.0%	8th of 13	20th of 42
-Avg.an.growth of gross dom. invt.	1970-82	6.4%	6th of 13	17th of 39
-Exports of goods & non-factor services as of % of GDP	1982	25.0%	6th of 13	14th of 42
-Value of manuf. exports (current \$)	1981	\$1.9 billion	2nd of 12	3rd of 30
-Avg.an.growth rate of exports by volume	1970-82	9.1%	1st of 13	2nd of 37
-Avg.an.growth rate of imports by volume	1970-82	4.3%	5th of 13	12th of 37
-Energy imports as % of merch.exports	1981	43.0%	6th of 13	13th of 30
-Net direct private investment	1982	\$185 million	2nd of 12	2nd of 26
-Net inflow pub. medium & long term loans	1982	\$1,114 million	4th of 13	6th of 43
-Ext.pub.debt. outst. & disbursed as % of GNP	1982	17.4%	[R] 2nd of 13	6th of 43
-Debt service as % of GNP	1982	2.2%	[R] 2nd of 13	19th of 43
-Debt service as % of exports of goods & services	1982	8.4%	[R] 2nd of 12	18th of 35
-Gross int'l. reserves in months of imports	1982	3.0 months	2nd of 12	9th of 37
-Defense expendtr. as % of central govt. expend.	1981	20.6%	1st of 10	4th of 27
-Population (millions)	mid-1982	48.5 million	2nd of 13	5th of 43
-Avg.an.growth rate of pop.	1970-82	2.4%	[R] 3rd of 13	13th of 43
-Avg.an.projected pop.growth rate	1980-2000	1.9%	[R] 2nd of 13	4th of 43
-Crude birth rate per 1000 pop.	1982	28 per thous.	[R] 2nd of 13	3rd of 43
-Crude death rate per 1000 pop.	1982	8 per thous.	[R] 4th of 13	4th of 43
-Life expectancy at birth in years	1982	63 years	5th of 13	5th of 43
-Infant mortality (age 0-1) per 1000	1982	51 per thous.	[R] 4th of 13	5th of 43
-Child death rate (age 1-4) per 1000	1982	4 per thous.	[R] 3rd of 13	4th of 43
-Avg. index of food production per capita (1969-71 = 100)	1980-82	138	1st of 13	3rd of 43
-Daily per capita calorie supply as % of req't.	1981	105.0%	6th of 13	10th of 43
-Pop. per physician	1980	7,100	[R] 10th of 13	12th of 43
-Pop. per "nursing person"	1980	2,400	[R] 12th of 14	26th of 42
-Adult literacy	1980	86%	4th of 10	4th of 39
-% of age group enrolled in primary school	1981	96%	11th of 13	17th of 43
-% of age group enrolled in secondary school	1981	29%	10th of 13	17th of 43
-Enrolled in higher edu. as % of pop. aged 20-24	1981	20%	5th of 12	5th of 37
-Commercial energy consump. per cap.	1981	284,000 kg.(oil equiv.)	7th of 13	9th of 42
-% of pop. of working age (15-64)	1982	56%	2nd of 13	5th of 43
-% of labor force in agric.	1980	76%	2nd of 13	14th of 43
-% of labor force in industry	1980	9%	12th of 13	32nd of 43
-% of labor force in services	1980	15%	12th of 13	26th of 43
-Avg.an.growth of labor force	1970-82	2.8%	5th of 13	12th of 43
-Project av. an. growth of labor force	1980-2000	2.2%	13th of 13	38th of 43
-Urban pop. as % of total pop.	1982	17.0%	13th of 13	32nd of 43
-Avg. an. growth rate of urban pop.	1970-82	4.3%	5th of 13	26th of 43

R = Reversed ranking

but also currently has one of the lowest projected population growth rates; employment and overall population is heavily located in rural, agricultural areas; measures of health such as life expectancy and death rates for infants and children are good even though access to medical staff and safe water is poorer than would be expected; food production per capita is highest among all groups, but nutrition is less good than would be expected.

These factors all suggest that Thailand is, for all practical purposes, entering a new era of "middle-income" status. The broad characterization of Thailand as a middle-income country also fits well with criteria established by AID in a recent draft policy paper on MIC's.¹

The implications of this for the U.S. foreign assistance program to Thailand are considerable. They suggest the need for a different type of AID strategy, both in terms of our relationship to RTG institutions and in the content of the activities we undertake.

2. Analysis of the national development process

Thailand has enjoyed unprecedented growth and development over the last two decades. Over that period the Thai economy grew at an average real rate of over 7% per annum, resulting in a GDP of some \$40 billion at current prices. Simultaneously, inflation and unemployment have both generally been held to levels below 5%.

An exceptionally capable national family planning program enabled the annual population growth rate to drop from more than 3% in the 1960's to 1.6% today. Individual personal welfare has improved by most estimates. The

¹AID/PPC. "AID Policy Paper: Middle-Income Countries", July, 1983.

incidence of poverty nationwide is estimated to have been halved in the last twenty years.

Thailand has managed this degree of development essentially in the absence of indigenous oil production (off-shore natural gas resources first came on stream in 1981) and on the back of widespread and highly diversified small-farm agricultural production. Rural-based agriculture (crops, livestock, fisheries, forestry) has been the primary catalyst to national economic growth. It is currently the source of some 60% of all export earnings and the primary occupation of 70% - 75% of all Thais. It is directly responsible for 21% of GDP, indirectly responsible for at least 50% of all domestic manufacturing, and conceivably is related to another 50% of combined trade and services. It should be noted (as would be expected in a situation of rapid development) that agriculture's contribution to overall GDP is diminishing relatively.¹

Thailand's economy is undergoing rapid transition. Agriculture's share of GDP has been falling steadily since the mid-1970s. Between 1978 and 1983, agriculture's contribution to total GDP declined from 27.5 to 21.8%. The outlook is for agriculture's share to continue to decline. The country's industrial development is progressing more rapidly, with manufacturing accounting for 18.6% of GDP in 1983. While energy problems remain serious and balance of trade and payment gaps have widened, the most significant issue for the 1980's will be employment generation as a rapidly growing work force faces

¹"Agriculture" includes only primary production. Processing of agricultural production, including such elementary processing as rice milling, for example, is included in the "manufacturing" category.

a decade of potentially slower growth. Current trends in Thai agriculture, among them the increases in intensification and mechanization, augur for a future deterioration of on-farm employment. Off-farm and selective non-farm employment are, and will continue to be, the primary compensatory outlets for labor. Some 50% of average total rural household income is derived from these sources. A considerable portion of future production growth and rural income at the household level will therefore depend on the availability of productive employment from off-farm sources.

Even though the National Family Planning Program has achieved impressive success, new entrants into the labor force (15-59 years of age) will remain close to 3% over the period 1980-90. This record high supply of labor coincides with a period of weak demand, making employment absorption a major political, social and economic issue. The absorption of excess labor supply will be a central orientation of the Sixth National Plan (1987-1991). From a policy perspective, considerable additional attention needs to be given to the improvement of agricultural productivity and further expansion of the nation's nascent agro-industrial base.

a. Emerging problems and structural imbalances

Recent growth and development have evolved rapidly enough to engender a number of problems which, if not dealt with in their early stages, could prove seriously detrimental to the nation's longer-term potential. Most of these problems are rural and many are interrelated. Most are already the subject of RTG concern and some, of preliminary action. All are potential real obstacles to the future economic growth and political stability of the country.

Included among the most critical are:

(1) Overconcentration of resources in Bangkok: One of the most striking aspects of Thai development is the excessive concentration of modern sector resources in Bangkok. With a current population estimated at 5.5 million, Bangkok is at least 50 times larger than the next largest urban locale. This demographic primacy (one of the highest in the world) also translates into selected forms of commercial, economic, administrative, and service primacy. According to the latest (1983) official statistics, the city of Bangkok was responsible for almost one third (32.8%) of GDP. In 1979, some 43% of all manufacturing establishments were located in Bangkok (and another 27% in the neighboring Central Region). Bangkok residents have access to piped water (80%), electricity (100%) and telephone lines (70%) in proportions significantly higher than most other areas.

Bangkok's gradual progression into a position of primacy was mainly the result of spatial and historical imperatives. While forward-looking planners are trying to reverse this trend, it would appear that the city has taken such a preponderant role in national development that its growth is becoming institutionalized: Bangkok now is the source of power and wealth for virtually every major aspect of the economy. Businesses are reluctant, in spite of government incentives, to set up outside the Bangkok metropolitan area because their markets are essentially located there. Government officials are reluctant to work upcountry because all major decisions are centralized in Bangkok and their families are closer to good schools, medical care, and cultural stimulation. Finally, new pressures are also forming in Bangkok which will require even larger public investment to counter such major growing problems as flood control, traffic congestion, air pollution and slum housing.

Over the last several years the RTG has attempted to encourage development outside of Bangkok. Considerable progress has been registered in developing rural support infrastructure networks in roads, railways, aviation, ports, electricity, and irrigation. Also, future non-Bangkok industrial growth will be actively promoted through the multi-billion dollar Eastern Seaboard Development Program. The Prime Minister has called for a major renewed effort at encouraging industrial development in upcountry rural areas. While the RTG is expected to continue its present emphasis on rural development, under the Sixth National Development Plan more attention will be paid to urbanization and industrialization, reflecting both the need to transform Thailand's economic base and the increase in urban migration anticipated as new land available for agricultural development rapidly declines. Major growth outside the Bangkok area has not materialized and is possible only through a substantially greater reallocation of the nation's human, financial and other productive resources. Failure to decentralize these resources will have a major restraining effect on the long-term growth and development of virtually all upcountry (meaning essentially rural) areas.

(2) Structural or resource-based poverty:

About 90% of Thailand's poverty groups are located in rural areas, often on lowest fertility farmland, with least favorable rainfall, and lacking adequate access to markets and other employment opportunities. As much as 50% of current poverty is located in the Northeast, and another quarter in the North. Rapid national economic growth, success in restraining population growth, the extension of cash crops for export into isolated areas, and major development of basic support infrastructure have all contributed to a steady

downward trend in the incidence of poverty over the last two decades.¹ As a generalization, these widespread recent improvements in rural conditions have meant that the phenomenon of poverty may increasingly be considered one which is related to localized resource endowments - meaning that remaining poverty groups tend to be "harder core."

The most fundamental inequality nationwide is that between urban and rural areas. This is significant since an estimated 80% of Thailand's population (or some 40 million people) live in rural areas, a percentage which demographers expect to decline only slowly over the next decade. Monetary income levels of rural groups, on the average, are perhaps 50% of median urban incomes, although regional differences may be important.² Life expectancy and school attendance are 10% lower, and sanitary installations and piped water 10 times less frequent in rural than in urban areas. This rural/urban dichotomy nationwide indicates the weak linkages between isolated urban economies and the surrounding rural production areas. Among urban groups income differentials are smaller, with Bangkok residents being some 30% better off monetarily than their upcountry urban colleagues. Recent data indicate a steady narrowing of that gap (Deemar, 1983).

It appears that the RTG may have gone as far as it can in reducing poverty with its existing strategy of "trickle-down" growth as supplemented by programs of redistribution and welfare. More creative structural solutions may be necessary, including:

¹Globally, the incidence of poverty is estimated to have fallen from some 50% of the total population in 1962/63 to perhaps 25% in 1975/76, the last date of reasonably accurate statistics.

²It is important to note that, when comparing urban and rural environments, monetary income alone does not reflect lower living costs nor numerous unquantifiable benefits to the rural household.

- policy modification at the national level, placing greater focus on the institutional determinants of poverty, such as improved tax collection, selected farmgate price policies, or greater decentralization of economic, political and administrative institutions;
- more creative and efficient use of existing RTG delivery systems to consolidate past gains (modifying programs on the basis of past experience, maintaining infrastructure systems) as well as to extend services deeper into the hard core poverty areas in a manner which is feasible and mutually acceptable to both the national and the local leaders. Government agencies will increasingly make the difficult step from working for the rural poor to working with those groups;
- greater use of non-governmental organizations to complement and/or substitute for government services and to increase the participation of local groups in the development process.

(3) Growing unemployment: Professional

observers are not unanimous in their estimate of the rate of unemployment nationwide. While current "open" unemployment statistically represents only some 2% of the work force, underemployment may attain 15-20%, and seasonal unemployment some 20-25%. Whatever their exact percentages, all are uncomfortably high from the Thai point of view, and because of demographic and economic trends will continue to grow through this decade.

Although agricultural employment remains the largest share of the labor market, its importance as a sector which can absorb the growing work force has been diminishing. In 1960, fully 82% of total employment was in agricultural production. The proportion was estimated in 1980 to have dropped to between 70-76%, still far above the agricultural proportions in other ASEAN countries (e.g. Philippines 46%, Indonesia 58%, Malaysia 50%). While industry contributed about 20% of GDP in 1980, its employment share was about 8%, up from 3-5% in 1960. The principal cause of the slowdown in agricultural employment growth has been the gradual disappearance of the land frontier, a factor not readily affected by government policy.

The labor force is expected to grow around 3% a year in the 1980s. This growth is attributable to a bulge in the aging of the population prior to the now widespread use of family planning in Thailand, not to any dramatic changes in labor force participation rates. In 1980 the participation rate was about 45%, including high female participation and substantial seasonal work of adolescents and young children. The 1980 labor force was estimated at 21.1 million. If the participation rate does not change, new entrants to the labor force will have amounted to some 15 million by 1995.

If all employment growth were absorbed outside agriculture, the non-agricultural labor force would have to grow at 10-12% per annum to take up the 3% annual increases in the labor force, while if all the employment generation were expected to derive from industrial growth alone, that sector would have to expand its employment by 38% a year. This arithmetic makes plain that if employment growth in agriculture continues to drop, Thailand faces the virtual certainty of rural underemployment, and open urban unemployment, of a more unambiguous character than has been the case thus far.

In the 1979 labor force survey nearly 70% of the agriculturally employed who were not working during the slack season were recorded as having left the labor force in favor of "waiting". This is one of the major characteristics of employment in developing countries that makes definition of employment and comparison with industrial economies difficult and ambiguous in meaning. (In fact, the recent introduction of the concept of the "discouraged" worker in U.S. employment data may be seen as a move towards greater subtlety in definition of employment status, a direction that recognizes distinctions which have long been seen as essential to understanding employment status in developing countries.) Among those who have broken with the traditional

pattern, e.g. young people who obtain off-season employment in Bangkok or provincial towns, or males migrating under employment contracts in the Middle East, the willingness to work in traditionally lax months, assuming sufficiently high incentive wages, represents a sharp break with the past and is (at least in the case of domestic seasonal migration at still low domestic wage levels) an indication that income pressures from the closing of the land frontier are beginning to emerge.

Provincial enterprises needing relatively large numbers of workers during the busy processing seasons (i.e. work forces involving several hundreds) draw on substantial female seasonal underemployment which takes the form of leaving the active labor force or of working on non-farm activities at home. As shown in the Rural Off-Farm Employment study,¹ while the number of hours worked over the course of a year tend to be high for both males and females (90 and 85% respectively of the number of hours normally worked in industrial economies), women's non-farm activities earn the lowest income and are looked upon as a residual allocation of time.

Serious unemployment and underemployment have also been registered among certain categories of the educated, who have been particularly affected by recent restrictions on growth of public sector employment. Statistics show major employment problems for graduates in sociology, law, education and vocational studies.

The decade of the 80's will witness new and significant problems in the job sector, which will require: sustained growth in agriculture, accentuated

¹"Rural Off-Farm Employment in Thailand," Dr. Narongchai Akrasanee and others, September 1983.

development of non-farm and off-farm employment opportunities (especially through stimulation of new urban and industrial sources of demand), and a restructuring of priorities within higher education systems so as to enhance, rather than detract from, national development performance.

(4) Lack of arable land: Thai agriculture has been highly competitive on world markets because of low input costs per unit of yield, due in large part to a land-extensive cropping system. One study (IBRD, 1983) attributes 90% of growth in agriculture over the last 20 years to the expansion of crop areas alone.

Although variable according to locality, farmers are now reaching the limits of readily accessible, good arable land. For the first time, they are being obliged to progressively abandon traditional fallow rotations, reduce further farm expansion, and utilize increasingly marginal (poorer soil, higher slope) lands. These practices have led to stagnating or lower yield levels, especially in resource poor areas and in the absence of additional production inputs.

To maintain a productive agricultural base farming systems must now be intensified, requiring greater use of fertilizers and better integration of competing land uses (livestock, tree crops, small ruminants, etc.). Likewise, new farm management techniques will be required if the farmer is to sustain production over the long term and ensure proper protection of the local soil and vegetative base. Intensification will not be an easy task and will remain a vital challenge to the creativity of Thai public and private sector institutions over the course of the 1980's and beyond.

Failure to satisfactorily address this problem through creative agricultural intensification, more integrated farming systems management and provision of non-farm income opportunities can be expected to have widespread repercussions, including:

- redistribution of resources away from less advantaged groups to those with higher resource endowments, as intensification is easier for the latter and growing land pressures will offer opportunities for speculators to purchase the land of the poor;
- growing land pressure will place greater stress on marginal lands and forest cover, and lead to declining productivity, particularly for poorer groups who are less able to take corrective action;
- intensification should entail increasing use of commercial energy and other inputs, implying a potential increase in imported oil as well as resulting in a relative decline in Thailand's traditional comparative advantage in agriculture;
- intensification (especially due to mechanization and reduced forest clearing), unless creatively biased toward labor inputs, could lead to growing under and unemployment among rural farm groups.

(5) Lagging scientific and technological

progress: As an emergent middle income nation Thailand cannot afford to neglect the modernization of its scientific and technological resources, particularly in moving toward semi-industrialized status. The country currently possesses the beginnings of a strong S&T foundation, but there are still major problems. Overall policies for national S&T development are somewhat vague, institutional responsibilities are both obscure and uncoordinated. Mechanisms have not been in place to establish adequate links between the "demand" and "supply" sides of S&T, and among the university, government and private sectors. As a result there is insufficient research and development. What there is does not enter the market place.

Human resource constraints are serious, and worsening. The number of active S&T personnel currently in Thailand is inadequate even to fulfill today's needs, let alone those of the future. The number of engineers and scientists in Thailand represents only 0.13% of the country's work force, compared to over 1.0% in Korea and Japan. According to educational trends in the 1980's, the numbers will not increase substantially. The annual output of engineers only increased from 1,518 to 1,585 during the period 1980 to 1984, while the annual output of scientists actually decreased in number from 1,688 to 1,174. Thai university faculties, for the most part, are primarily discipline oriented, not problem focused. The number of young people being attracted to S&T is declining. The best scientists and technologists are not remaining committed to their specializations, and are becoming distracted by having major activities in non-specific or non-technological areas. Many S&T personnel are frequently lost from their professions before the mid-career stage because of a lack of support, recognition and reward.

Institutionally, departments, faculties, industries and governmental organizations have been constrained by the lack of a means through which they can exchange information and coordinate efforts. Professional societies have been weak and have had only minor programs. Technical investigators, whether in universities or government agencies, too often operate independently and without needed socio-economic inputs.

Inadequate budgetary support is a serious constraint. In the public sector there is a lack of resources and support to carry out needed research. The private sector similarly devotes insufficient resources for R&D.

To sustain broad-based growth, expand employment, and enhance productivity, Thailand must increasingly focus on the application of

scientific and technological solutions to pressing developmental problems. Emphasis will need to be placed on S&T programs of both immediate and future value. The RTG recognizes the need for scientific and technological modernization, recently elevating S&T development to national priority status. On April 13, 1984 the Foreign Minister of Thailand and the U.S. Secretary of State signed a bilateral agreement to promote enhanced collaboration in science and technology between the two countries.

(6) Degradation of natural resources:

Thailand's land-extensive agricultural traditions and practices in fisheries, forestry and industry have "mined" the natural resource base to a point where each of these sectors exhibits significant trends toward resource depletion. Forest cover has declined from 60% of total national area in 1960 to under 30% today. Problematic soil erosion (soil loss exceeding 30 tons/hectare/year) is currently officially estimated as endemic to some 30% of the Kingdom. Streams are carrying a heavy silt load into lowland irrigated areas, wetlands and storage reservoirs. Traditionally abundant fish, shell and other aquatic life have been substantially reduced in the shallow Gulf of Thailand. Soil salinization has become a major problem as soils are inadvertently mismanaged through irrigation and other modern techniques. Air/water pollution in urban areas is widespread.

Thailand's natural resource problems have not yet been successfully addressed for numerous reasons, including: 1) the complexity and newness of the problem, which necessitates innovative, often localized solutions; 2) the necessity for RTG interdepartmental cooperation and field-level decentralized coordination; 3) the fact that solutions often run contrary to short-term

economic gain considerations which are pursued by individuals at the expense of the community.

Failure to begin correcting these trends over the coming decade will hinder future national development in that:

- ecological problems are but the starting points for complex interrelationships within a larger socio-economic and natural resource system, implying considerably larger damage than would be assumed from the problem alone (the problem of soil erosion, for example, is one which ultimately impacts on siltation of productive lowland paddy land, hydropower reservoirs and irrigation systems, flooding, wetland flora and fauna, as well as forest cover degradation, as upland farmers are obliged to move further into remaining forest lands);
- continued degradation of the natural resource base implies increased hardships (decreasing agricultural productivity, less fuelwood for cooking, fewer traditional off-farm opportunities) for the most impoverished groups, ultimately contributing to increased poverty and to a climate of political instability, especially in more isolated rural areas.

Although there are limited prospects at present regarding a concerted effort to deal with serious natural resource and environmental concerns, AID will nonetheless open a dialogue on this subject with the RTG.

(7) Energy dependence: Thailand is, and will continue to be, vulnerable to major shifts in the world energy context. However, the current energy outlook is temporarily good with a favorable supply/price situation for imported petroleum, and with slowly growing indigenous gas production. But domestic consumption is growing as well, due to patterns of economic and individual income growth, structural changes in industrialization, and more intensive agricultural production, among others. All indications are that these consumption trends will continue.

It can be expected that energy will remain a major potential problem over the course of the next decade. It will represent both a major drain on foreign exchange reserves (\$2.5 billion in 1983) and a primary cause of chronic balance of trade deficits (31% of the total value of imports in 1982 and 24% in 1983). The RTG cannot afford to relax its forward planning in energy conservation, including proper pricing policies, alternative energy development and selected educational, advisory and regulatory measures. Finally, greater attention should be given to rural fuelwood energy, which has become increasingly rare in recent years due to the dwindling size of forest cover. Significant improvements in this area are closely linked to major changes in forestry and land use policies.

(8) Macro-economic stress: Overarching all domestic initiatives are a number of basic macro-economic concerns which are critical to the proper flow of capital resources to the development system. They are summarized below under the broad headings of limitations on government expenditures, external debt and economic vulnerability.

- Limitations on government expenditures: Figure 1 provides a simplified illustration of the total system of capital resource mobilization (foreign and domestic) which was necessary to sustain national economic development in FY 1983.

Public sector resources are essentially those provided in the Thai national budget, with the notable exception of foreign grants and loans, both ODA and commercial. Table 2 provides summary data on recent RTG budget expenditures, revenues and deficits.

Figure 1: Economic Development Resource Flows
In FY 1983

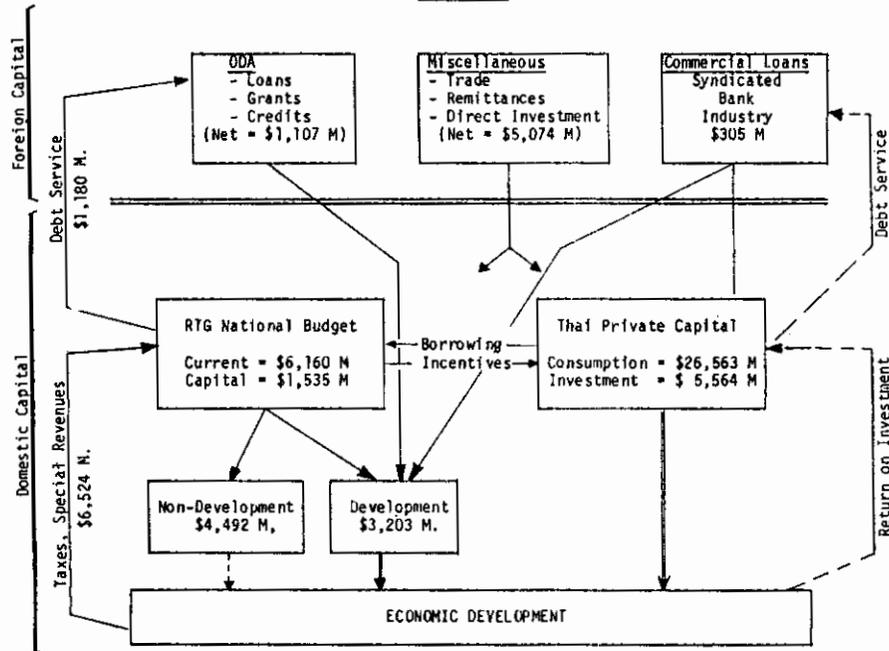


Table 2: RTG Budget patterns

Fiscal Year	Expenditures (\$ Million)	Revenues (\$ Million)	Deficit (\$ Million)
1985 (est)	9,261	7,739	1,522
1984 (est)	8,348	6,956	1,392
1983 (est)	7,275	6,236	1,039
1982	6,616	4,928	1,668
1981	5,650	4,803	847
1980	4,895	4,006	889

Latest current budget expenditures (FY 84) by functional classification include education (20.0%), defense (19.8%), economic services (14.8%), and debt service (17.4%). Five ministries (Defense, Education,

Finance, Interior and Agriculture) receive almost two-thirds of the total. In line with its policy of budgetary restraint, the RTG has held budget increases to levels just over inflation in recent years, although recurrent expenditures (especially debt service payments and salaries) have increased more rapidly than investment.

Total revenues in FY 84 were drawn primarily from taxes (89%). Both revenues and taxes, taken as a percent of GDP (15% and 13% respectively) have basically stagnated at this level for the last decade. Major tax classifications in 1984 included business taxes (19.6% of total taxes), import duties (18.1%), corporate income tax (10.3%) and personal income tax (10.4%). Growth in RTG expenditures has not been matched by similar growth in revenues and fairly large budgetary deficits have become chronic (see Table 2). Budget deficits are covered essentially by domestic borrowing (94% of total deficit coverage in FY 84). The rest is through drawdowns in treasury cash balances.

Overall expenditures by the RTG in excess of domestic resource availability have had an impact on inflation, the rate of private business investment, and, in the medium-term, may have an impact on growth. The Mission's review of Thailand's resource mobilization record for the period 1978-82 has corroborated a similar study undertaken by the IBRD for the period 1970-1978, demonstrating that the public sector, given its low propensity to save, relies heavily on foreign resources as well as scarce domestic private savings to fund its investment program. This means, most pertinently, that the RTG is competing with the private sector (especially the informal private sector) for available capital, and, secondarily that it may run a long term risk of exceeding its foreign debt service capacity. While investment is necessary to the growth and transformation of the economy, in many areas RTG investment levels are too high, misallocated, or both.

It would seem generally appropriate that the Royal Thai Government continue to restrain further expansion of public expenditures. The fact that foreign ODA and commercial borrowing do not figure in RTG budget planning further masks the seriousness of the expenditure problem.¹ Finally, it should be remembered that recurrent expenditures are growing disproportionately, implying a reduced RTG capacity to undertake productive investment. The key point is that RTG expenditures are already stretched to their "reasonable" limits--meaning that either the government needs to carefully reformulate its developmental role (vis-a-vis the private sector for example), or, do things better within existing budget constraints -- or both.

- Economic Vulnerability - One of the most salient characteristics of the Thai economy and one of the primary determinants of future growth is its linkages to international labor, capital, and commodity markets. The value of international trade in 1983 was \$16.7 billion, representing a surprisingly high 41% of total GDP, and a majority of manufactured goods circulating within the domestic economy are either import products or have a high import content. Through evolving patterns of interdependence, the growth prospects of Thailand remain very much tied to world economic performance, especially that of the industrialized market countries. While the direction of trade is fairly diversified, the two countries of Japan and the United States still represent almost one-third of total trade.² Structural, economic or other modifications to the trade posture of a small number of trade partners could

¹Since Thailand only began large foreign borrowing in the late 1970's, current budget deficits do not yet fully reflect the burden on government resources caused by this form of development financing.

²Key trade partners in 1983: Japan (\$3,776 M.), USA (\$2,244 M.), Saudi Arabia (\$1,247 M.), Singapore (\$1,154 M.).

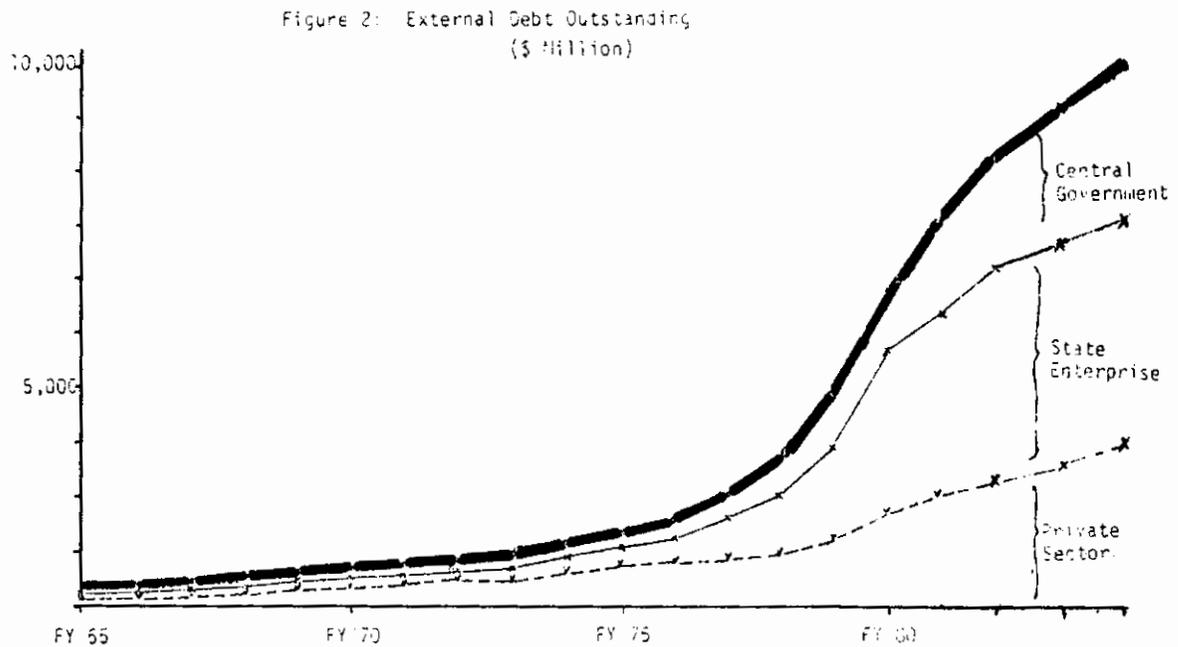
have a major negative impact on Thai growth.¹ In 1983 the trade deficit reached a record high \$3.9 billion, more than double the 1982 deficit of \$1.6 billion. The major causes were lower domestic production levels and stagnating prices. Alarmed by the country's burgeoning trade deficit, the RTG devalued the Thai baht by 14.8% in November 1984.

Thailand has committed itself to an export-led economic policy for the future, and will, as a consequence, further reinforce the linkages between domestic and international growth. Such a policy is intended to permit a faster and more diversified growth than if reliance were on domestic consumption alone and, obviously, will be a major element of RTG attempts to redress its large and growing balance of trade deficit. The upstream and downstream impacts of an export-led policy are multiple, however, and merit the careful attention of numerous RTG policy and operational agencies.

Possible negative consequences of such a policy could realistically include: (a) large, new public investments to promote exports, (such as the Eastern Seaboard Program) adversely affect the budget deficit and external debt positions, as well as indirectly affect net national income distribution and employment by drawing off large amounts of limited public resources from other, broader-based RTG programs; (b) a small number of influential groups who control the export sector will disproportionately benefit from increasing concentrations of land and other productive resources; (c) new pressures on land reinforce the natural resource/poverty cycle described previously.

¹This could, of course, be positive as well. If, for example, Japan liberalized its current agricultural import policy, it could become a major client for Thai rice, meat or other agricultural products.

- External Debt - Related to the above, another form of economic vulnerability is the growing problem of external debt. The size of overall foreign capital resource inflows is substantial, and, as is noted in Figure 2, recent increases in foreign borrowing are major. This increased dependence on foreign capital has essentially been due to RTG attempts to maintain high levels of domestic growth through the difficult post-oil crisis period, especially through expansion of basic support infrastructure. Private sector borrowing followed the public sector lead. As of September 1984, total public and private sector debt stood at \$10.6 billion.



Latest (1983) figures indicate an overall debt service to export ratio of 19%, of which 10% was in the public sector and 9% in the private sector. This is a domestic issue as the legal ceiling for public debt has been established since 1977 at 9% by Cabinet resolution. In mid-1984 the RTG Cabinet considered raising the debt ceiling but instead opted to keep the level at 9%, with the proviso that as a special case it can be exceeded during FY 1984-87. Toward the end of the year a decision was made to hold new foreign loan commitments for FY 1986 to \$1.6 billion, substantially less than the \$2.2 billion target contained in the current Five Year Plan.

Thailand's previous and present conservatism in foreign borrowing has permitted temporary increases in foreign borrowing without necessarily jeopardizing the larger economic picture. Nevertheless, the evolving debt situation dictates prudence in future public borrowing. This is particularly true for commercial borrowing which is substantially more expensive than ODA. In this respect, it would behoove the RTG to develop policies which demonstrate preference for "softer" loans (measured by the "grant content" yardstick).¹

b) Future growth and development

Thailand has progressed steadily since World War II to the present era of modest agricultural intensification and semi-industrialization. During this time frame the Kingdom has increasingly come to recognize the key and growing role of the private sector in overall development.

¹ Current "grant element" terms of USAID loans to Thailand are estimated at 71%, Japan at 64%, ADB at 34%, and IBRD at 33%.

Success in recent national development has however also paradoxically set the stage for the problems to be found in the more dynamic and complex Thailand of the 1980's. The era of "easy" growth now belongs to history. The Thai, from both the public and private sectors, are beginning to grapple with unprecedented competition for land, continuing population pressures, unemployment, and degradation of the natural resource base, as well as fewer export options in a competitive and substantially slower world economy. This new, more difficult decade will most demonstrably impact on the poorer (generally rural) segments of Thai society, who, using commonly accepted definitions, still represent a politically relevant mass of some 12-15 million people. The decade of the 1980's will be primarily a period of structural stress and the previously noted emerging problems could be precursors to potential structural failures. Some cross-cutting themes have already been mentioned: increased agricultural productivity requires intensification, itself linked to more efficient extension, creative research and proper price policies; reversal of natural resource degradation trends necessitates revised land policies (both national and individual), new environmental monitoring systems, managed intensification of land use, appropriate energy policies, and industrial regulations; improved government management requires a decentralization of delivery structures, greater sensitivity to locally-adapted techniques, increased interdepartmental cooperation, and creative integration of programs into the rural planning process; fostering of private sector development necessitates improved public/private sector cooperation, decentralization of the revenue and power base, critical examination of the role of state enterprises, and appropriate tax and

incentive policies consistent with the national welfare; reduced un- and underemployment requires expanded rural investment to include rural industries, improved incentives and collaboration between the public and private sectors, and the application of new technologies. Finally, and importantly, these and other new critical themes must be met essentially within the limitations of existing RTG human and financial resources.

From the USAID Mission perspective (and critical to its future strategy), the maintenance of broad-based rural growth and development will be essential throughout the 1980's. As with Taiwan in the 1950's, Thailand must increasingly support the balanced decentralization of private sector production and government services deeper into rural areas. Because of the historic sensitivity of rural Thai to market considerations, the Mission concludes that a more productive orientation of resources (especially in lesser developed areas) will be toward enhancement of opportunities for agricultural and non-farm (rural industry) production rather than attempting to force production increases in the absence of an appropriate market. Better prices and greater demand for production will increase employment opportunities, improve revenue (both on and off-farm) and turn the farmer rather than the central government into the principal agent for rural development programs.

B. AID in Thailand

1. AID as part of total foreign donor flows

Foreign official development assistance (ODA) is and will remain an important component of the total economic development process in Thailand.

Public sector institutions (central government and state enterprise) are the direct beneficiaries, but clearly the private sector is impacted upon as well. ODA is important because it is a major source of external capital (some 19% of total net foreign capital inflows in FY 83) and because it represents a key source of direct development funding.¹ Because of recent disproportionate increases in the national debt burden and problems with domestic resource mobilization, it can be assumed that ODA will remain a preferential form of national development financing for the foreseeable future.

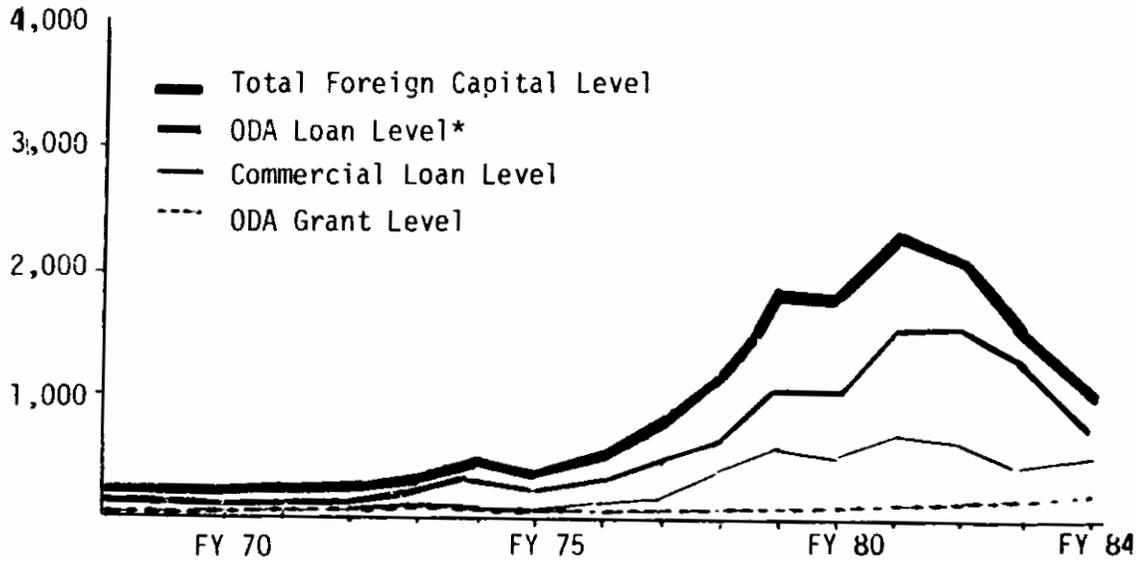
a) Evolution of ODA

Figure 3 illustrates general trends in RTG foreign borrowing since 1968. Total ODA was kept extremely modest through the mid-1970's, (\$100-150 million range) and consisted of 40% grant and 60% concessional loan assistance. AID contributed the majority (some 75%) of ODA grants and IBRD the majority (some 60%) of ODA loans over that period. Following on the heels of the 1973-74 oil crisis and particularly with the Fourth (FY 77-81) and Fifth (FY 82-86) National Plan periods, borrowing from both ODA and commercial sources mushroomed. Total government ODA borrowing reached \$1.1 billion² by FY 82 and commercial borrowing over \$400 million.

¹In FY 83, Thai budget resources allocated to "development" were \$3.1 billion, whereas ODA resources amounted to \$1.2 billion, and foreign commercial borrowing some \$305 million. Respective shares of development funding from these three sources are therefore estimated at 65%, 28% and 6%, respectively.

²Ministry of Finance records for Thai FY 82. Does not include \$127 million of defense loans, nor \$324 million of Exim credits.

Figure 3: Foreign Loans/Grants to the RTG
(\$ Million)



*ODA loan levels noted here also include defense loans and exim-type credits.

ODA grants to the RTG in that same year were \$160 million, indicating that total ODA obligations for FY 82 equaled some \$1.3 billion. Of this total, the IBRD accounted for 38%, Japan (grant and loan) 33%, and ADB for 18%, followed far behind by AID (grant and loan) at under 3%, as well as numerous other small bilateral and multilateral donors. As in the 1960's and early 70's, the IBRD's traditional position as largest ODA lender has continued through 1982 (43%)¹, but Japan has since overtaken AID as the largest grantee (51%)².

¹Versus Japan (30%), ADB (20%) and AID (2%).

²Versus AID (10%), EEC (10%) and UN (8%).

b) Use of ODA

The Mission reviewed ODA use patterns from official RTG sources for the period 1961-81, and then undertook a similar independent survey of the more recent 1981-83 timeframe from individual donor records.¹ While the former contained considerable historical information, the latter was particularly useful in demonstrating latest current trends and has been summarized in Table 3.

Not surprisingly, ODA grant funding has been utilized by the RTG primarily for technical assistance and training. Key sectors for grant investment have traditionally included social development,² agriculture, education, and public health, in that order, although most recent trends demonstrate heaviest emphasis in agriculture and education. ODA loan financing has been generally utilized for commodities, construction and services in the infrastructure sub-sectors of energy, transportation/communications, agriculture (emphasis on irrigation), and public utilities. With much of Thailand's basic infrastructure in place, however, there has been a noticeable redirection of ODA loans into agriculture, heavy industry and a wide range of other concerns.

On an individual donor basis, Japan and the ADB have historically focussed on energy and heavy infrastructure (roads, public utilities, industry), whereas IBRD lending has been somewhat broader, especially in agriculture and education. All three of these key donors have recently begun branching out into the study of, and investment in, numerous other sectors.

¹For detailed information on 1961-81 ODA patterns, see Mission Basic Data Memo entitled "Foreign Capital Flows", dated October 11, 1983.

²Includes public administration and security.

Geographically, distribution of funding by broad region over the last decade has remained remarkably close to percentages noted in Table 3. Despite general donor intentions to the contrary, aggregate lending would still appear to go primarily to the broadly defined Center Region¹ (48%), with the remaining half split up among the North, Northeast and South (16%, 15% and 21% respectively).² This apparent contradiction is largely attributed to the heavy skewing of Japanese aid to the Center Region (67%), itself due to the fairly rare but disproportionately large contributions of ODA to selected major infrastructure there (e.g., Japanese loans of \$130 million and \$100 million to develop the Bangkok airport and Bangkok elevated expressway, respectively). Within regions, Table 3 shows that energy and agriculture are the two primary ODA investment options in the North and the South, and that transportation/communications and agriculture predominate in the Northeast and Center. Finally, Table 3 shows that average total ODA over the Thai FY 81-83 period varies somewhat from figures presented earlier for FY 82. Average annual ODA for the FY 81-83 timeframe was IBRD (\$505M), Japan (\$355M), ADB (\$172M), and AID (\$31M).³

c. ODA projections

While admittedly difficult, it is both useful and possible to attempt some limited forecasting of future flows of ODA to Thailand. Based on

¹Includes Bangkok, Center, East and West.

²Distribution should improve somewhat if remaining donors were included in Table 3.

³It should be noted, for the record, that donor internal statistics will differ from these levels because of alternative fiscal years and accounting practices.

discussions with individual donors, ODA levels are planned to continue to grow over the CDSS timeframe. Despite donor intentions, however, obligation levels could actually decline, especially given the recent firmer stand taken by the RTG in accepting foreign loan obligations, both commercial and concessional. RTG policy has become increasingly restrictive in terms of using ODA loans for technical assistance, training or research, and the RTG is more aggressively asserting its preferences to individual donors on the acceptability of specific loan proposals.

World Bank: As now articulated, future IBRD assistance to Thailand will continue to be linked to the basic objectives of the Fifth National Plan, most particularly, 1) the long-term issues of poverty alleviation, promotion of employment and reduction of income disparities, and 2) the medium-term issue of restructuring the development of the industrial sector (e.g. Eastern Seaboard), promotion of domestic energy conservation/development, increased public resource mobilization and improved institutional capacity in the public sector.¹ An important aspect of this strategy is a shift from project-specific to sectoral lending, especially in agriculture, industry and education. Previous Bank planning has been for global lending to expand beyond the \$505 million/year average level noted earlier for FY 81-83, if bankable projects are identified. In this regard it is instructive to note, however, that IBRD lending for FY 84 plummeted to \$100 million, although the planning level was \$635 million and Cabinet approval had been received to accept World Bank loans up to a \$605 million ceiling.

In part due to persistent Bank emphasis, "structural adjustment" became a main theme in the Fifth Plan, and structural adjustment loans (SAL) became a

¹World Bank Lending Program, FY 1985-89.

key aspect of the IBRD's portfolio here. SAL I (\$150 million) and SAL II (\$175 million) have been used as a supplementary tool by the RTG to bring about more efficient reforms in mutually agreed upon selected areas, including state enterprises.

Japan: In recent years Thailand has been the world's largest recipient, on a per capita basis, of Japanese ODA. Japanese assistance is distinct from the aid provided through the other big two donors in that it is bilateral. The Japanese Government has clearly indicated that Thailand is considered vital to Japan's regional interests - politically and strategically because it is an island of free world economic development in Southeast Asia, and commercially, because Japan is Thailand's primary trade partner. Due to current RTG concerns with external debt, bilateral Japanese aid to Thailand may not grow beyond its average estimated FY 81-83 level of \$355 million (official estimates are for increases of 10% per year). Since 1981, Japanese loan assistance has been oriented toward rural/agriculture development, energy, human resources, and large industry.

Asian Development Bank: ADB - RTG relationships will undertake distinctive changes over the next few years. Whereas overall levels of loan assistance (average \$172 million for FY 81-83) will probably grow only slowly, if at all in the near term, the nature of lending will shift. Greater attempts will be made to diversify lending out of the traditional energy and transport sectors into others such as agriculture (including irrigation, livestock, fisheries, cotton, sericulture and agricultural credit) and large industry. More "sector" lending will probably be attempted instead of normal "project" lending. It should be noted that the ADB is presently considering establishment of a resident office in Bangkok.

Other donors: While representing perhaps less than 10% of total ODA flows, it is worth noting that several larger members of this group already foresee moderate increases in their ODA. Australia and New Zealand see Thailand as a neighbor and friend, both strategically and economically. The EEC will increase assistance through its cassava-reduction commodity agreements. The United Nations will maintain an important presence, especially since its regional ESCAP office is based in Bangkok. We expect that similar or somewhat larger levels of assistance by this group, and in highly heterogeneous, selected sub-sectors will continue.

2. AID and overall USG posture in Thailand

U.S.-Thai official relations were opened in 1833 with the signing of a treaty of Amity and Commerce. In the ensuing 152 years the two countries have established a series of important relationships spanning a wide variety of mutual interests.

In the sphere of cooperation in development, the first Economic and Technical Cooperation Agreement between the United States and Thailand was concluded in 1950. Our development assistance has consistently been closely linked to larger foreign policy objectives in the region since that time. During the 1950s technical assistance under Point Four gradually evolved into a large infrastructure program centered on transport and industry. In the 1960s and into the early 1970s, events in Vietnam and concerns with internal communist subversion led to a significant increase in U.S. assistance with counterinsurgency becoming the unifying theme of the AID program. As the Indochina conflict drew to a close, a decision was made to phase out economic assistance. Renewed concerns with Thailand's strategic importance and

economic stability, however, led to a reversal of this decision. During 1978-82 the AID Mission undertook a development program based on rural poverty considerations stemming from the Congressional Mandate. A total of 24 new projects were initiated during this latest period with a focus on basic services delivery in rural areas, especially in the Northeast.

Although the U.S. development assistance program has undergone changes over time, one element of constancy and major importance has characterized past and present programs. The United States has helped finance the foreign education and training of some 11,000 Thais in various development skills. Recipients of U.S.-sponsored education and training are now to be found across the board in Thai government and non-government institutions, with many in positions of leadership. U.S. participant training has been a major vehicle for development of Thailand's human resources and further strengthens, through old ties and new, the bond between the two countries.

Other forms of U.S.-Thai cooperation have been equally prominent in the overall relationship. The maintenance of Thailand's continued economic growth, territorial integrity, and domestic stability is central to the continued stability and prosperity of Southeast Asia and constitutes a major U.S. foreign policy goal for the region. In implementing our commitment to Thai security, we have developed a close military and security assistance relationship of some \$100 million per year with Thailand, directed primarily towards modernizing the Thai Armed Forces and making them capable of meeting regional threats. This has enhanced Thai cooperation on other important U.S. policy objectives in Thailand, including narcotics control and assistance to Indochinese refugees.

3. Analysis of current AID portfolio

In light of the CDSS analysis of key determinants to growth and development, the Mission reviewed its current development portfolio for its relationship to a future middle income CDSS strategy. The conclusions were mixed.

First, it is believed that several of our current sectoral orientations, can and should furnish useful inputs toward the design and implementation of a new Mission program. These include:

- science and technology transfer: Our ongoing FY 84 Agricultural Technology Transfer and expected FY 85 S&T projects will draw on U.S. and Thai sources to break bottlenecks and expedite growth in agricultural, rural, and industrial development.
- private sector: The existing Private Sector Development and Seeds II projects will foster public/private sector cooperation and, when combined with the recent results of the recently completed Rural Off-Farm Employment Project, will identify opportunities for private investment outside Bangkok.
- community management: The Decentralized Development Management, Northeast Rainfed Agricultural Development and the new Rural Development Monitoring/Evaluation Projects will contribute to an enhanced understanding of the prospects and future development of decentralized management and planning.
- agricultural productivity: The Northeast Rainfed Agricultural Development and the Khon Kaen University Project will promote both improved and sustainable agricultural productivity through their focus on local farming systems research and development.
- population: Population Planning II will continue to contribute significantly to overall fertility reduction, itself directly related to a wide range of basic development problems.

Second, it is believed that the past Mission strategy has focused too extensively on the direct encouragement of regional agricultural production. In its Supplementary Paper on the Thai Agricultural Sector

(1984),¹ the USAID Mission concluded that:

(a) Thailand's agriculture is funded beyond the public sector's current absorptive capacity (annual budget of the Ministry of Agriculture and Cooperatives exceeds \$600 million, foreign loans and grants for agricultural development exceed \$300 million annually);

(b) The Ministry of Agriculture and Cooperatives' (MOAC) capacity to effectively manage new agricultural undertakings is severely constrained by institutional, administrative and personnel difficulties (there are currently 167 ongoing or planned foreign-funded agricultural projects--the most severely understaffed MOAC divisions are those relevant to the handling of projects, e.g., the Northeast Regional Office of the MOAC is 34% understaffed);

(c) There are limited opportunities for major AID assistance in agriculture given current RTG borrowing policies (which generally do not favor extensive technical assistance and training--precisely those activities that AID emphasizes in agricultural programs); and

(d) An agricultural growth rate of 4% is realistic and achievable at current rates of investment (the IBRD estimates an annual growth rate in crops (GDP in constant prices) of 4.2% during 1981-86 and 4.3% during 1986-90).

Under these circumstances, consideration of major new AID-supported bilateral programs in agriculture is not realistic for the foreseeable future.

¹See "USAID/Thailand FY 1986 Country Development Strategy Statement: Supplementary Paper on the Thai Agricultural Sector," June 1984.

Centrally-funded activities, along with the Mission's ongoing bilateral projects, will continue strong support of Thai agriculture during the CDSS planning period.

Third, Mission strategic emphasis on a geographic focus in the Northeast and our "hands-on" operating style in dealing directly with the rural poor have caused numerous projects to become bogged down in implementation detail. Our collective experience demonstrates that such an approach compromises Mission effectiveness in that: a) AID human and financial resources tend to be used in circumscribed, "scattered" pilot area initiatives with few real linkages to key national policies or operations, and in arenas where critical foreign analysis is difficult and not wholeheartedly solicited; b) it necessitates a demand for major Mission management time, and this when reductions, rather than increases, in staff levels are envisaged; c) it places undue limitations on AID flexibility to deal effectively with new problems and has diffused resources in a manner which makes the AID program increasingly peripheral to key middle-income constraints.

These aspects of current AID operations will all be dealt with in this paper. They point to, most pertinently, various degrees of withdrawal from a hands-on strategy to one which focuses more on longer-term institutional and policy constraints, the canceling of an exclusive geographic focus in the Northeast, and a new, more collaborative program and operations working style.

Fourth, with the remarkable success presently being achieved under Thailand's National Family Planning Program (population growth rate down to 1.6% in CY 1984 and still declining),^{1/} the lack of appreciable RTG interest

¹See Mid-Term Project Evaluation, Population Planning II project (493-0325), August 1984.

in loans for health undertakings,¹ and saturation of the agriculture sector with domestic and external resources, the USAID Mission plans no new bilateral programs in these areas over the CDSS period. Significant levels of centrally-funded support, however, will be sought and applied to these sectors on a selective, qualitative basis.

PART II - STRATEGY

A. Determinants of a Generalized Middle Income Strategy

The Mission first thought through the fundamental elements of a generalized middle income strategy and then its application to Thailand prior to arriving at the FY 1986-88 program proposal presented in this CDSS. The determinants of a generalized strategy identified include:

- As government interventions in production begin to reach upper limits in productive investment and complexity, MIC status implies a change in the roles of government and the private sector with an increasingly greater reliance on the private sector as the determinant of sustained growth and development. This will require government to further reformulate its posture vis-a-vis the private sector, notably to that of creating a policy and infrastructure environment which fosters successful private initiatives.
- Entry into the middle income ranks signals notable progress in moving from a subsistence to a modern, competitive production mode. Scientific and technological advancement is no longer a future objective but an immediate need. Since the economics of most developing states are essentially built around agricultural and selected forms of rural production, a redirection to agribusiness and rural industrialization (and the technology this implies) are necessary intermediate steps in the achievement of self-sustained growth.

¹See Thailand Health Sector Assessment, Dr. Robert Benjamin et al, October, 1983.

- In general, movement into MIC status suggests the need for a greater decentralization of public as well as private development structures. Self-sustaining, equitable growth necessitates eventual broad-based national participation in the economic system and national polity.
- The enhanced institutional, human and financial capabilities of a MIC are an indication of the country's policy-making capacities and its ability to exert sovereignty over the development process. AID's role then becomes increasingly one of buttressing the host government's own priorities and programs. The existence of a strong host country skills and institutional base also calls for a significant shift in emphasis from AID-managed to host government administered programs/projects.
- Achievement of MIC status implies attainment of self-sustaining growth at some future point. Present and future AID programs in MIC countries need to be oriented toward building a strong, cooperative relationship in preparing for the day when AID concessional assistance plays no major role.
- AID policy requires a hardening of concessional terms as countries move up the middle income ladder. This means increasing dependence on loan funding in AID assistance programs and a decline in the proportion of grant aid. Implied in a transition from grant to loan financing is a greater voice by the borrowing country in the use of development funds.
- The achievement of MIC levels of human resource development means that large foreign technical assistance packages will become increasingly outmoded over time. As AID moves toward more direct support of host government designed programs and extensive use of loan financing, both factors will tend to produce a reduced and more focused use of expatriate consultants.

Using this framework for reference, Thailand's transition from low to middle income status will require attendant changes in AID's strategy toward the Kingdom.

B. Determinants of a Strategy Specific to Thailand

The formulation of a middle income strategy for Thailand has taken into consideration several determinants:

- Though overall development indicators demonstrate Thailand's very substantial development accomplishments, both in terms of gross national product and quality of life indicators of the average Thai, the macro-indicators mask a number of issues of a structural and institutional nature. Several of these, particularly those related to rural development, have the potential to seriously inhibit future economic progress and possibly to disrupt Thailand's existing social stability. Some of these issues concern organizational changes in the public and private sectors which will be necessary to build a more diversified, internationally competitive economy. Others concern the maintenance of sufficient progress and a voice for all levels of Thai society so that social cohesion can be maintained in a period of rapid economic change.
- AID currently accounts for less than 3% of total foreign development assistance to Thailand and other donors are now moving into virtually every sector in which AID has traditionally played a major role. Judged solely on the basis of resource flows, the U.S. has now become a "minor" (although not inconsequential) actor in Thai development and must reorganize its program objectives and content appropriately. Thus, the USAID program must be inexorably linked with the next five year plan, which basically coincides with the CDSS time frame, to ensure relevance. The USAID Mission must be increasingly innovative and at the cutting edge with its activities as traditional and proven USAID programs are turned over to other donors.
- The U.S. and Thailand have over the years established a relationship highly valued by both. It is essentially a consequence of the major U.S. role in economic and military assistance played between the 1950's and the early 1970's. A large number of now-senior Thai officials and intellectuals were trained in the U.S. and understand and share our approaches to development. The U.S. development assistance program remains an important and valued source of collaboration between the U.S. and Thailand, the continuation of which would serve the interests of both.
- Redirecting the AID strategy is complicated by the need to shift from a mixed loan/grant to a substantially loan-financed program in line with AID/W strategy for Asia. This transition will be difficult due to existing Thai policies governing the use of foreign loans (infrastructure focus) and the type of policy and institutional goals AID generally wishes to pursue.

C. Basic Strategy Options

The Mission examined a number of broad options in its formulation of a revised strategy for Thailand:

1. To gradually phase down U.S. development assistance activities over the next several years in anticipation of an eventual termination of the AID program. This would be consistent with the level of development which Thailand is achieving and with the reality that, as a portion of total resource flows, our financial contribution to Thailand's development is minimal. It would, however, result in weakening an important and mutually beneficial linkage between the two countries, possibly weakening the overall U.S. relationship with Thailand in the areas of mutual security, commerce and trade, narcotics and refugees. It would also ignore Thailand's need for addressing a number of serious emerging problems of an institutional, policy, and structural nature, and the possible major impacts they may have on national stability and growth.

2. To continue themes of the current program and existing modes of operation. This would mean continuing the existing regional emphasis with a hands-on rural poverty focus. Traditional AID programming concepts would be retained and the existing donor-client relationship maintained. This option would essentially ignore the changing nature of the problems facing Thailand, the implications of Thailand's increasing ability to manage its own poverty program, and advances in the sophistication and competence of our Thai counterparts. It also would perpetuate the kinds of implementation problems we have with our current portfolio, as well as preclude strong linkages to policy considerations in areas deemed important by the Mission and Thai counterparts.

3. To work toward a fundamentally redefined relationship in the area of development cooperation, involving a collaborative and balanced exchange of

information and technical knowledge, and concentrating on emerging problem areas. This option is consistent with AID's limited resource availabilities, involves a mature partnership and offers the greatest prospect of maintaining and even strengthening technical, intellectual, political and economic relationships between the two countries. This option holds the greatest promise for a successful future program in Thailand.

D. The Strategy

The Mission defines the long term strategic objective as the establishment of a more collaborative relationship between the U.S. and Thailand in the area of development cooperation which goes beyond the traditional donor-client relationship, and which is consistent with Thailand's emerging status as a middle income country. The substance of this relationship will focus on issues of a policy and institutional nature which bear on the productive, equitable, and sustainable development of Thailand's rural resources. The middle income strategy proposed here shifts the focus of AID's program from a regional poverty perspective to one more capable of accommodating evolutionary changes in Thailand's growth patterns and needs. It also provides an opportunity to plan--and prepare for--a future relationship with a wealthier Thailand in which traditional concessional assistance no longer has a role but strong economic and other forms of cooperation continue.

The Mission believes that the future relationship may evolve into a binational commission or council staffed by nationals of the two countries. For the moment it is anticipated that steps taken during the CDSS period will be directed essentially toward more modest forms of collaborative management

as well as experimentation with relatively more flexible programming mechanisms.

1. The transition

The path for a new middle income strategy and program structure in Thailand has already been cleared. During FY 1986, only two projects not directly related to this strategy will require funding. The total amount needed is \$4.1 million, beyond which there is no project mortgage. Thus, an entirely new program can be financed during FY 1986-88 which is consistent with the priorities to be established by the Sixth National Plan.

2. Program proposal

The Mission program will be built around four basic elements: (a) a focused loan program, (b) a fund for emerging problems in development (grant), (c) a fund to support PVO development (grant), and (d) increased use of specialized centrally funded AID/W programs, particularly those in population.

a) Loan program. In order to concentrate our resources in areas of high RTG priority and to take advantage of AID's unique opportunities to have a positive impact on Thai policies and institutions, we propose two core loans (science and technology, rural industries and employment) for the entire period of the CDSS.

Our analysis has shown both lagging rural production and growing un- and underemployment as among the most serious political and economic problems which Thailand will be facing during the next decade. This in itself suggests the appropriateness of major programs in these areas. Perhaps more

importantly, these two topics are both RTG priority concerns and will be central themes of the Sixth National Plan (which has a timeframe approximately the same as this CDSS). This is key to the Mission objective of developing a new, more mature relationship with Thailand as a MIC, and which requires a greater realigning of our priorities with their own. Science and technology, and rural industries/employment, are also areas where no major focused foreign donor assistance (with the exception of the Eastern Seaboard Development Program) has been provided to date, and are the only sectors identified by NESDB as a priority for AID loan funding. Further, AID's own analysis supports the conclusion that these two sectors are vital to an evolving Thailand, and notes historically that no developed country has achieved industrialized status unaccompanied by rapid technological change. It is anticipated that this combined program will require particular analysis of, and support in, the following key areas: policy constraints, institutional barriers, the role of the public and private sectors, investment opportunities, and, underlying all of these issues, employment.

1) Science and Technology Development Program

Thailand is entering a critical new era of transformation from an agrarian society to a semi-industrialized state. Having reached this threshold, modernization of Thailand's scientific and technological base is essential if the country is to maintain its historically high growth levels, foster economic resurgence in rural areas, and provide jobs for an increasingly skilled work force. In directing AID resources toward a scientific and technological development program, special emphasis will be placed on policy support and commercialization of S&T activities to the

maximum extent possible. A key aspect of the program will be to faster employment-generating industrialization through the establishment of an S&T institutional framework capable of solving technology bottlenecks.

Policy Dialogue

Research studies to analyze policy constraints now limiting development will be undertaken and workshops and conferences will be held to thoroughly discuss potential new policies or changes to existing ones. Dialogue will be facilitated on all aspects of science and technology, from the laboratories to the highest levels of government, by the new Science and Technology Policy Institute to be created by the Ministry of Science, Technology and Energy.

Institution Building

A major focus of this program is to institutionalize the process of solving problems. Organizational structures will be developed, management techniques be applied and people will be trained to provide a quality program in S&T laboratories in particular, and universities, governmental agencies and industries in general. The Center for Genetic Engineering and Biotechnology, and nascent organizations in metallurgy, material technology and electronic technologies will be strengthened in program, people and direction.

A model program in undergraduate training in science and engineering will have a significant initial impact on the quality of education at Chulalongkorn University, and on all universities as the approaches to be used are eventually replicated elsewhere. The Thailand Institute of Scientific and Technological Research will be focused on standards, testing and productivity consultation and will be strengthened to become a first rate institution.

Private Enterprise

Major initiatives will be undertaken to link the public and private sectors in Thailand and bring about a "demand-driven" focus to the program.

Private enterprises will be encouraged to participate through special aspects of this program. Joint ventures and other involvement of U.S. private enterprise will be encouraged. The program will be closely coordinated with AID's bilateral and centrally funded private sector activities.

Technology Transfer

An essential focus of the program is to transfer, adapt or develop technology that can help resolve problems currently limiting Thai development. Technology will be largely transferred from abroad, and adapted to Thai conditions and requirements. Most of the technology will be directly applied to the solving of problems in agriculture, rural development, and health related industries.

The program is based upon a strategy for addressing S&T development in Thailand over the long term as well as focusing on immediate concerns. The AID project itself is being designed to cover the first 4 years of a proposed 7 year program. Funding for the remaining 3 years of the program will be provided, if appropriate, based upon an in-depth evaluation. The intent is to address both current and future problems. It is expected that this project will serve as a catalyst for S&T based industrialization and the involvement in that process of other organizations and donors. Basic components of the project are as follows:

Research, Development and Engineering (RD&E)

RD&E technical activities will help diagnose, resolve, improve or control problems limiting development, develop processes and products for improved or new industry development, and improve standards or controls to enhance quality. Based on an analysis of their importance to S&T structural change and their relevance to both urban and rural development, RD&E undertakings

will focus on (a) bioscience and biotechnology, (b) materials technology, and (3) applied electronic technology. Activities in bioscience and biotechnology are centered upon agricultural development and critical health concerns of Thailand. Activities in materials technology will entail industries which have strong backward linkages to rural employment and rural natural resources. Finally, applied electronics technology will receive RD&E emphasis as a principal means to allow Thailand to remain competitive in world markets.

A Revolving Fund will be established to finance private sector proprietary RD&E activities. The Revolving Fund is proposed on the assumption that the return on investment in company and industry directed R&D is adequate to allow for the recovery of R&D costs, and that establishment of a credit facility to finance the front end development costs is an effective means of encouraging Thai industry to undertake R&D for its own technical problem solving. It is a necessary component of a comprehensive endeavor to reduce Thailand's dependence on foreign technology in the long run.

The RD&E activity may be performed within the borrower's own facilities or in laboratories selected by the borrower (private, university or public sector). Joint ventures between U.S. firms and Thai firms for technology development (along the lines of the U.S.-Israel Binational R&D Foundation model) can also be financed out of the Revolving Fund. Promotion of such joint ventures would require an additional service to assist Thai companies in locating suitable U.S. partners for the joint venture. It has been shown that a most efficient manner to facilitate development of in-house company R&D is to encourage joint ventures between companies in LDC's in partnership with companies in developed countries that have their own R&D capacity, to engage in a joint research effort.

An industrial development support component will provide support in three key areas. First, standards testing and quality control will be strengthened, in order to make more reliable standards available to industry and to improve quality control in the production process of industry. Second, a technical information access center will be supported by the project to permit industry to remain current on technological changes occurring in the international markets, to know how to search for technological choices and to assess their comparative benefits and costs. Third, a diagnostic/research design service will be established to offer well publicized, low cost technical assistance services to industry to diagnose technical problems and identify requirements to solve these problems.

An essential feature of the project's design is strengthening of Thailand's overall S&T institutional capacity. This objective will be met through a variety of means. First, the Ministry of Science, Technology and Energy, or alternatively, a proposed Science and Technology Authority of Thailand, will be strengthened to enable it to effectively manage this project's diverse activities in the near term, and to play a leadership role in mobilizing, managing and in the utilization of resources for the scientific and technological development of Thailand into the future. Second, the project will provide support to Chulalongkorn University for the establishment of a model undergraduate science and engineering program. To ensure that the program is relevant to development and market place needs, a program for student internships in outside labs and industry will be established. Private sector and university consultation will be promoted. The third activity to be supported is a Science and Technology Career Support Program. A series of awards designed to recognize and support the career development of outstanding

scientists and technologists will be established and supported under this component. Lastly, project funds will be set aside not only to promote professional exchanges between the Thai and U.S. S&T communities but also among RTG agencies, educational and research institutions and the private sector.

The Supplementary Strategy Statement and Project Identification Document for the Science and Technology Development Project (493-0340) were approved in July 1984. Work on the project's final design continues, with the Project Paper expected to be completed in March 1985.

2) Rural Industries/Employment Program

Since the March 1984 Washington review of the FY 1986 CDSS, the Mission has commissioned studies on rural employment/unemployment, rural credit, rural industrial structure, rural industrialization policy, and women in rural industry. These studies and other analyses form the basis for the strategy and course of action proposed for support of rural industries.

The objectives of USAID's rural industrialization strategy are to promote rural employment, increase rural income, and reduce income disparities between rural regions and the greater Bangkok area. The rationale for this strategy and the interventions proposed to implement this strategy are outlined and discussed below.

The Government of Thailand anticipates that employment generation will be one of the major problems facing Thai economic development in the medium term. Agriculture sector employment will continue to grow as required, but at a cost of declining marginal productivity due to a combination of (a) further expansion of cultivation into very marginal lands, and (b) rising disguised

unemployment as the land/labor ratio declines in settled areas. Similarly, in the informal services sector, more employment can be absorbed by increasing division of micro retailing and other occupations. At an aggregate level these outlets for new job-seekers will keep official unemployment rates relatively low, but at the cost of restraining growth in per capita income on family farms and depressing wage rates. In sum, without more rapid growth of labor-intensive agricultural intensification along with labor-intensive growth in industry and services, real wages (especially for the unskilled) will stagnate if not decline and regional income inequalities begin to widen again after a long period of narrowing.

Rural industrialization can absorb underemployed rural labor and increase rural wages. To a large extent this industrialization is dependent upon increased rural demand arising from increased income from agricultural production or specialized crop production resulting from agricultural intensification. At the same time certain types of rural industrialization can help promote intensified agricultural production and increased agricultural income. For example, agro-processing industries can lead to area concentrations of provincial demand growth that can, in turn, support demand-linked provincial manufacturing. And more efficient local industries serving local agricultural requirements can reduce agricultural production costs resulting in increased discretionary income to increase demand for other locally produced consumer goods.

The USAID strategy for rural industrialization recognizes that the linkage between agriculture and rural industry is basic to rural industrial growth. The interventions planned to implement this strategy are intended to build on this important linkage.

In directing AID resources toward a rural industries and employment program, fundamental objectives will be to increase rural employment, to increase the value added of existing rural production, and to foster the improved welfare of all groups (rural and urban) outside the Bangkok metropolitan area. Particular attention will be given to activities located in less developed areas, which have broad impact, and which remove or relieve the policy and institutional constraints to achieving these objectives.

The expansion of agro-processing industries has the potential for increasing rural incomes because of powerful backward linkages to agricultural employment and forward linkages to transport and other sectors. At the same time, agro-processing industries can make an important contribution to production and demand growth by initiating agricultural diversification through the creation of new avenues for agricultural response to external market opportunities. Furthermore, there are strong incentives for locating such industries in rural areas near the source of production. Therefore, the centerpiece of USAID's strategy for rural industrialization is the promotion of agro-industry.

While the RTG and private sector have many of the components required for rapid exploitation of agro-processing, and while the infrastructure such as roads and power are in place to support such industries, the infrastructure has not been fully utilized and certain major constraints to expansion of this industry sector have not been overcome. These major constraints are medium term credit and the coordinated linking of farm production to industry requirements and industry production to markets. To overcome these constraints, USAID proposes a Rural Industry Development Fund, and a Rural Industrialization Assistance Facility.

Small scale, town-based industries such as those producing agricultural and local consumer goods, while also dependent on the growth of rural incomes do offer extensive possibilities for increased employment and incomes because such industries are numerous and widespread (in 1980 there were about 17,000 such industries outside the greater Bangkok area) and because minimal assistance can result in major improvements. Therefore, a second component implementing USAID's rural industry strategy will focus on these town-based industries. This component will consist of consultative services and entrepreneur training, and a small entrepreneur credit scheme.

AID's commitment to rural industrialization leads naturally to a concern for the encouragement of regional growth centers, without which decentralized industrial development is unlikely to be sustained at any significant level. Unless smaller cities are able to provide the facilities and services necessary to industrial and related commercial development, Bangkok will continue to attract most new development. In addition, the people attracted to such cities by employment opportunities will require affordable housing. The AID Housing Guaranty program in Thailand will therefore be an important complement to the rural industrialization initiative.

Housing Guaranty funds will be used to finance the development of infrastructure and low-cost housing near employment opportunities in regional cities. The housing efforts will focus on the provision of serviced lots of core-houses in order to keep both initial and long-term housing costs to a minimum. Private sector involvement in the servicing of sites and the production of core houses is considered central to this portion of the strategy. Infrastructure programs will involve water and sewer programs as well as a significant program of rational land acquisition and development.

AID will also support training for municipal officials, as well as efforts to administer local revenue programs and to raise new resources.

Finally, appropriate government policies and regulations will continue to be necessary to stimulate rural industrialization. As a basis for such policies, USAID's strategy will support research and evaluation in this area.

To sum up, the RTG sees employment generation as a major objective in the Sixth Plan period. It hopes to develop a strategy that promotes rural industrialization as one of the important sources of employment creation. This will require an emphasis on industrial sub-sectors that: a) have strong backward linkage effects on agricultural employment; and b) are labor-intensive. A related objective of rural industrialization is the contribution it can make toward lessening the severe regional imbalance of Thai development.

Although the factors favoring industrial location in the Bangkok region (and the Eastern Seaboard in future) will certainly remain powerful, recent years have seen the beginnings of RTG and institutional interest in promoting rural industries, reflected in various programs that have been and will be initiated and expanded. The Mission strategy and proposed program identifies innovations that have yet to be tried and that seem warranted, and points of leverage where assistance from USAID will help achieve significant expansion of rural industry and rural employment in a fairly short time frame. The development of this USAID program will also contribute significantly to the analysis and planning the RTG is undertaking as it prepares for the Sixth Plan.

The FY 1986 Rural Industries/Employment project (493-0343) is being designed to achieve several institution-building objectives:

a) a fully-functioning agro-processing institution to promote and assist formation of new agro-processing enterprises (and expansion of existing ones), and to help enterprises deal with all incentive and other government-interface aspects of private project formation in a coordinated manner;

b) demonstration of feasibility of a network approach to provincial enterprise lending, involving joint participation of the Industrial Finance Corporation of Thailand (IFCT) and commercial bank branches;

c) institutionalization of experience in pitfalls and successful techniques for agro-processing project formulation and implementation, including solution of production and farmer-supplier relationships at one end, and export marketing of new crops in new markets at the other end; and

d) development of new lending methods in participating commercial banks designed to increase the role of project analysis (as compared with reliance on personal integrity and collateral), and to reassessment of commercial bank perceived risk with respect to small and medium scale enterprises (SMEs). This reassessment would be reflected most specifically in acceptance (after cessation of availability of concessional AID funds) of greater flexibility with respect to acceptable collateral (e.g. acceptance of machinery and inventories) and extent of collateral coverage required.

Through placement of \$60 million of loan funds (of which the AID portion would be \$30 million) in three years, the project would facilitate creation of roughly 150 new agro-processing investment projects. The town-based industry loan program would deal with smaller average loans, and would thereby be expected to finance roughly 200 loans.

A special allocation under the project will finance policy studies of problems and issues relevant to rural industrial development. It is expected that many of the agro-processing loans will finance export-oriented enterprises. Three subjects relating to export efficiency and competitiveness should be researched, and can illustrate the kinds of problems that should be explored under the project allocation for policy studies.

First, while the intermediate products used by agro-processing firms (other than raw agricultural produce) will vary among products and processes, there are a few that are common to the industry and important enough in cost structure to be significant determinants of export competitiveness compared with production conditions in other exporting countries. Cans, probably the main example of such inputs, were cited by some processors as significantly more costly in Thailand than in Taiwan for example. Such inputs should be identified and studied with respect to cost to the agro-processor and the extent to which the conditions of supply or aspects of the relevant taxes (e.g. business sales tax) impose fiscal or other costs that may be reducing competitiveness. The tax and incentive structures differ between tradeable (e.g. machinery parts) and non-tradeable (e.g. power costs) inputs, and administratively between Board of Investment (BOI) promoted and non-promoted enterprises.

Second, as part of the base study on marketing channels, the access of agro-processing firms to export incentives (e.g. domestic tax and import duty rebates and exemptions) should be described in detail, especially with respect to differential access by firms using different channels (direct export vs. sale to export trading companies vs. sale to general trading companies) where the incentive systems appears to discriminate in practice against the small

and medium scale enterprise in favor of the large direct exporter. A follow-up study should then be undertaken with project funding to analyze the impact of this structure and develop suggestions for appropriate changes in policy/practice.

Third, the position of agro-processing in the present structure of export financing in Thailand warrants special attention. The needs for strengthening Thailand's export financing and increasing its efficiency are being studied by World Bank analysts from the perspective of manufactures generally. The possible special needs and problems of agro-processing should be considered in the context of this work, and may call for additional analysis beyond the scope of the IBRD work.

In each of the above areas, the studies may identify issues of policy and/or administration that should be addressed by the RTG. USAID is not raising these issues with the RTG in the context of problems with clearly demonstrated need for solution as a condition for the viability of project objectives, for two reasons. First, the extent to which these problems of the manufacturing export sector fall on agro-processing (which presumably has relatively low import content, low manufactured inputs other than initial machinery and plant, and low cascaded domestic inputs compared with other manufactures) needs to be established. Second, all these fiscal and export incentive structure questions are being explored and discussed in the policy analysis work under the structural adjustment program, so that processes to address these issues systematically are well underway. USAID is highlighting the need to give special attention to agro-processing industries and to undertake agro-processing specific studies within this framework.

Except for the proposed emphasis on products suitable for currently under-utilized irrigation areas, the agro-processing funds would be available throughout the country. The town--based enterprise fund however, will focus on a small number of selected provincial towns. A striking aspect of the distribution of potential benefits, especially in agro-processing direct employment, is the differentially high impact that can be expected in the creation of new employment opportunities for women. Overall, women comprised about 44% of the work force according to a 1977 survey by the National Statistical Office. The proportion of males and females is about equal in employment in manufacturing, commerce, services and agriculture. Exceptions are in mining, construction, public utilities and transportation, where males predominate. Somsak¹ has noted that in 1978, 38% of all factory workers were female, 66% of textile workers, and 60% of the food and beverage industry employment.

In a 1980 survey of Thai industries, 38% of managers were women. Women play a particularly important managerial role in the production of certain commodities, such as fruit, vegetable and food processing, furniture and wood-carving and ready-made garments. A study² financed by USAID in 1984 as well as interviews of women in rural enterprises showed that there are no legal barriers to women rising in any business, in any sector. In Thailand, women can be found at the upper echelons of many private companies, banks and government offices.

¹Report on Rural Industries in Thailand, Dr. Somsak Tambunlertchai and others, October 1984.

²Women in Rural Industry in Thailand, Amara Pingsapich and Jacques Amyot, October 1984.

At the provincial level, female employees frequently receive lower wages than men. Although discrimination may be a part cause, more importantly it seems to reflect the low skill and education levels of women in general who enter the rural labor force, and the fact that many are only part-time employees in off-farm industries. Judging by the large numbers (a large majority in fact) of women already employed in agro-processing industries visited, the economic motivation for seeking off-farm employment is well entrenched.

The USAID Mission supplementary Rural Industrialization Strategy was approved in October, 1984. Work on the Project Identification Document is underway, with completion expected February 1985.

b) Jointly managed fund for emerging problems of development.

Part I has outlined a number of problems of particular importance to the future of Thai growth and development. In order to provide responsive and timely funding for these and other development constraints, the Emerging Problems of Development (EPD II) Project (493-0341) is being formulated. It will be future-oriented, jointly programmed, and administered at a policy instead of technical level. This activity will be funded at a level of some \$18 million in grant funds over the period FY 1985-90. The grant will have a wide variety of uses, from the funding of consultants to the financing of collaborative research ventures between Thai and American universities on topics of particular priority concern. Preliminary areas of support identified for the project's initial year include:

- Technical support of selected analyses for the RTG's forthcoming Five Year Plan (1987-91);

- Provision of expatriate Development Economist to serve as Special Assistant to Secretary-General and other key officials of the NESDB;
- Technical assistance to help establish the research agenda of Thailand's first non-profit policy research foundation, the Thailand Development Research Institute (TDRI);
- Policy formulation and management skills assistance in rural development and private enterprise for Khon Kaen University;
- Assistance for Natural Resources Management, to consist of problem assessments and management innovations for topic areas such as soil and water conservation, watershed management, coastal resources management, water resource planning, urban energy and resource management, industrial pollution and toxic wastes management, and environmental assessments and planning;
- Municipal management and socioeconomic development in selected regional cities;
- Short term technical assistance and intensive management training for support of the National Family Planning Program;
- Technical consultancies and/or training for health policy studies, health sector financing, primary health care management, community nutrition, and operational research;
- Five year staff development program for the NESDB to provide long term training in transport planning and management, econometrics, urban and regional planning, planning and management of science and technology, industrial and financial management, environmental planning and resource management, systems engineering, human resource and manpower planning, public policy research, and computer science;

c) Grant fund to support PVO development. Although there are thousands of non-profit associations in Thailand, a recent USAID survey identified only 80 Thai non-profit institutions which have a developmental focus. Beginning in FY 1985 and throughout the CDSS period, AID will utilize a Mission-managed grant fund totaling approximately \$1 million annually to encourage and support private and voluntary organization (PVO) sponsored development activities. Initially, U.S. PVO's are expected to absorb the bulk of available funding. In the out years, AID financing will increasingly shift to indigenous PVO's. Substantial attention will be given to approaching PVO assistance within the context of broader Mission program strategies, with intent to strengthen PVO capacities and roles within Thailand's larger development effort. The PVO project is complementary to, and will be coordinated with, the Peace Corps' Small Project Assistance Program which is also supported by AID.

The bulk of resources directed to the PVO's will be for proposals which: a) contribute to development of the PVO's capacity to deal with priority problems on a significant scale; b) develop a strengthened role for private initiative within the broader framework of Thai development policy--quite possibly involving some explicit collaboration between the PVO and one or more public agencies; and c) offer realistic prospects of leading to self-sustaining, self-financing development action.

As of December 1984 a total of 12 project proposals amounting to \$2 million in requested AID assistance were received from 6 U.S. and 3 Thai PVO's for FY 1985 funding. The proposals request financial support for the following project activities:

Hilltribe Health Care

Primary Health Care

Family Planning and Primary Health

Natural Family Planning

Dental Health

Multi-Handicapped Child Support Services

Thai Book Translation/Distribution

Youth Non-Formal Education and Vocational Training Career Counseling

Community Based Opium De-Toxification

Community Irrigation Systems

Rural Resources Formation

d) Centrally-funded programs: The current Science and Technology Bureau centrally-funded programs in agriculture and population (e.g., Peanut Cooperative Research Support, Biological Nitrogen Fixation Center, and programs of the Population Council, Family Health International, and Family Planning International Assistance) are particularly germane to Thailand. They bring to bear the best of U.S. scientific and technical knowledge in areas of importance. In addition, the linkages established between U.S. and Thai institutions through such programs are the kinds that can endure in the future without direct A.I.D. assistance. Particular attention will be given to population, an area that will require constant surveillance to ensure continued decline in the growth rate, and may well call for more highly targeted specialized assistance. The EPD II project specifically reserves funds for "buy-ins" to centrally-funded programs important to the future of Thai development.

PART III - RESOURCES

Based on the AAPL funding levels furnished by AID/W, we foresee a budget breakdown for the future as follows:

A. Functional Account Grant/Loan Levels

<u>Functional Account</u>	<u>Approved Assistance Planning Level</u>			
	<u>(\$000)</u>			
	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
AGR/RURAL DEV/NUTRITION	1.6	20.6	3.7	10.6
POPULATION	1.4	1.0	-	-
HEALTH	.2	.2	.2	.2
EDUC/HUMAN RESOURCES	-	-	-	-
SPECIAL DEVELOPMENT	<u>18.3</u>	<u>5.2</u>	<u>23.1</u>	<u>16.2</u>
DA TOTALS	21.5	27.0	27.0	27.0
ESF TOTALS	5.0	5.0*	-	-
		(1.0)	(1.0)	(1.0)**
HOUSING GUARANTIES	<u>(-)</u>	<u>(25.0)</u>	<u>(25.0)</u>	<u>(25.0)</u>

*Affected Thai Program.

**Narcotics Control.

B. Program Budget

	<u>(\$000)</u>			
	<u>85</u>	<u>86</u>	<u>87</u>	<u>88</u>
Pipeline Projects	1.4	1.0	3.1	-
Emerging Problems of Development II	3.0	5.0	5.0	5.0
Rural Industries and Employment Loan	-	20.0	-	20.0
S&T Loan	16.1	-	17.9	1.0
PVO Grants	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
	<u>21.5</u>	<u>27.0</u>	<u>27.0</u>	<u>27.0</u>

Depending upon the pace of project design it is possible to fund most, if not all, of the proposed new program initiatives beginning in FY 1985. USAID is currently analyzing as part of S & T program design what level of grant support will be required.

C. Economic Support Fund

1. Affected Thai Program

During the period FY 1980-84 the U.S. Government contributed \$19 million in ESF grant funds to assist Thai villages disrupted by the influx of refugees and the civil strife along the Kampuchean and Laotian borders. ESF resources are co-mingled in a general fund supported by other donors and matched by contributions from the RTG budget.

Funds used for the Affected Thai Program finance the construction of public health facilities, household water supply and irrigation systems, access roads, community development centers and other rural development activities, and for the training of village volunteers in forest protection, livestock development, elementary and vocational education. To date, some 200,000 Thai villagers residing along the borders with Kampuchea and Laos have received assistance under the program. Additional ESF contributions for continued support are planned for FY 1985 and FY 1986. Although no ESF Funds are currently programmed for FY 1987 and beyond, given recent events in neighboring Kampuchea, it may be unrealistic to assume that a continuing need for future support will not exist.

2. Narcotics Control

Opium poppies are grown in eleven Northern provinces. Of the estimated 5,000 hectares under cultivation approximately 73% fall within the two

provinces of Chiang Mai and Chiang Rai. Production in 1984 was estimated at 41.5 tons. Net farm income ranges between \$190 to \$1,140 per hectare depending upon current prices. Thailand's opium consumption is estimated at some 35 tons per year. Opium and its derivatives produced in the "Golden Triangle" are transported in illicit trade routes to all parts of the world and it is the source of between 10 and 15% of the heroin imported into the United States annually. While middlemen and traffickers make handsome profits, the hilltribes who cultivate the opium poppy live in primitive and impoverished conditions. The roots of their poverty and low standard of living are deep and solutions proposed must address the full range of constraints placed on their self-development.

AID plans to initiate in FY 1986 a Highland Village Development project to be supported by \$5 million in ESF grant funds. The goal of the project is to reduce the cultivation and use of opium in several contiguous sub-districts in the provinces of Chiang Mai and Chiang Rai. The project's purpose is to overcome the structural conditions of poverty (poor health, illiteracy, low incomes, marginal agricultural productivity) of highland tribes.

The proposed project acknowledges in its design the need to maintain flexibility in dealing with villages in which opium cultivation is a traditional source of income, a recognized and effective medicine, as well as the cause of serious levels of drug addiction among the hilltribes themselves. AID realizes that to date crop substitution projects have had limited success either due to the crops' unsuitability to hilltribe conditions (lack of credit, markets, or expertise), lack of enforcement of a ban on opium cultivation by RTG authorities, or both.

The Highland Village Development project strategy--a village-based integration of health, non-formal education and income generating assistance (primarily agricultural in nature but not exclusively)--is predicated upon the establishment and maintenance of a voluntary reduction of opium cultivation in participating villages.

The project will establish a provincially-administered, community-managed outreach program concentrating on low-cost health, non-formal education and income generating activities in exchange for the identification and maintenance of targets for reduced opium cultivation. "Interface teams" of the type currently working with the hilltribes under AID's Mae Chaem Watershed Development project in northern Thailand will be the principal link with village communities.

PART IV - WORK PLAN

The Mission Work Plan has been developed on the basis of management concerns over the CDSS period. It is divided into the following sections:

(A) mortgage, (B) pipeline aging, (C) expenditures, (D) deob-reobs, (E) PID and PP schedules, (F) obligation schedules, (G) staffing, (H) evaluation plan, (I) active centrally-funded projects, (J) outstanding audit recommendations, (K) measurable targets, and (L) project implementation reports.

A. Mortgage

On the assumption that a Science and Technology program is approved in FY 85 and a Rural Industries and Employment program in FY 86, and that our levels stay relatively constant, the Mission will have totally committed its loan funds for FY 87, the second increment for S&T; and for FY 88, the second increment for Rural Industries and Employment. Similarly, grant funds are mortgaged to Population Planning II through FY 86, Mae Chaem Watershed Development through FY 86 or 87, EPD II through FY 88 and to PVO II through FY 89. There is no mortgage for loan funds beyond FY 88 or for grant funds beyond FY 89. In FY 89 the Mission's mortgage is a \$1 million grant for PVO II.

B. Pipeline Aging

As of 9/30/84, USAID had 11 country projects active or terminating that are 4 or more years old, totalling \$25,656 million. These projects range in age from more than 4 years to one, Lam Nam Oon, which is more than 7 years old and still has a loan/grant pipeline of \$744,478.

USAID also has two regional projects active as of 9/30/84 managed by the Mission greater than 4 years old with a pipeline of \$2.670 milion: Asian Regional Remote Sensing and ASEAN Agricultural Development Planning.

A detailed listing by project follows:

<u>Project Number</u>	<u>Title</u>	<u>LOP</u>	<u>Age</u>	<u>9/30/84 Pipeline (\$)</u>
<u>Country Projects</u>				
493-0272	Lam Nam Oon On-Farm Dev. (G)	8	7	61,934.00
493-0272	Lam Nam Oon On-Farm Dev. (L)	8	7	682,444.08
493-0289	Land Settlements (G)	6	5	43,494.64
493-0289	Land Settlements (L)	6	5	504,069.29
493-0291	Primary Health Care (L)	8	6	2,479,814.53
493-0294	Mae Chaem Watershed (G)	7	4	4,415,504.51
493-0296	PVO Co-Financing (G)	7	5	1,618,815.92
493-0297	Hill Areas Education (G)	5	4	511,448.17
493-0305	Anti-Malaria (G)	6	5	45,085.26
493-0305	Anti-Malaria (L)	6	5	115,654.69
493-0309	Emerging Problems of Dev. (G)	5	4	2,301,247.65
493-0312	N.E. Small Scale Irrigation (G)	5	4	1,184,315.60
493-0312	N.E. Small Scale Irrigation (L)	5	4	5,293,090.18
493-0317	Agricultural Planning (G)	5	4	1,805,056.99
493-0327	Affected Thai Program (G)	5	4	4,594,192.16
<u>Regional Projects</u>				
498-0253	Asian Reg. Remote Sensing (G)	6	5	1,656,239.22
498-0258	ASEAN Agric. Dev. Planning (G)	5	4	1,013,363.87
<u>Totals</u>				
		<u># 4+ Yrs.</u>		<u>Pipeline</u>
Mission Projects (Grant and/or Loan)		11		\$25,656,167.67
Regional Projects - Mission Managed (Grant)		2		2,669,603.09

The Mission does not consider the aging of the pipeline to be a serious issue. Eight of the eleven projects on this list are scheduled to be completed in either FY 85 or 86 with the remaining three in FY 87. We will perform a similar analysis for next year's Work Plan picking up projects with a pipeline of four or more years.

C. Expenditures

The Mission is pleased to note that expenditures have shown an increase in recent years. In FY 1982 they were \$14,712, in FY 83 \$20,268 and in FY 84 \$23,203. We are projecting expenditures in FY 85 of \$31,657 and in FY 86 of \$38,950. If these latter two estimates are close to actual, the Mission will be expending more than its yearly obligations. The following table places expenditures in relationship to obligations and pipeline:

	<u>ECONOMIC ASSISTANCE*</u>			
	<u>Obligations</u>	<u>Expenditures</u>	<u>Pipeline</u>	<u>% of Increase in Pipeline</u>
<u>FY 83</u>				
	21,215	20,268	75,910	-
<u>FY 84</u>				
	31,603	23,203	83,793	+ 10.4%
<u>FY 85 (Estimate)</u>				
	26,500	31,657 (Est)	78,636	- 6.2%
<u>FY 86 (Estimate)</u>				
	32,000	38,950 (Est)	71,686	- 8.8%

*Includes ESF

D. Deobligations/Reobligations

At this time, the Mission is not aware of any significant deobs through the CDSS period. In FY 85 there is the possibility of about \$250,000 in grant funds and a similar amount in loan funds. However, we intend to review the portfolio during FY 85 to determine the effects of the recent devaluation and identify any projects which have funds excess to project requirements.

E. PID and PP Schedule

The Mission will submit its PID for the Rural Industries and Employment program in February 1985 and expects to complete the project paper in September 1985. The Science and Technology PP will be submitted in March 1985. The Mission is also working on a proposed ESF financed PID for work in opium producing areas. We expect to submit the PID in March with a PP to follow in October 1985. There will be a requirement to agree with the Bureau sometime in FY 86 on the content of the program for FY 89 and beyond which will require PIDs in FY 87 with PP's to follow in FY 88.

F. Obligation Schedule

Grant: PVO II, though each fiscal year FY 85 to FY 89.

Grant: EPD II, the first quarter of each FY 85, 86, 87 and 88.

Grant: Mae Chaem, final tranche either FY 86 or 87.

Grant: Population Planning II, FY 85 and 86

Grant: Affected Thai Program (ESF), FY 85 and 86.

Grant: Highland Village Development (ESF), FY 86, 87 and 88.

Loan: Science and Technology, June 1985
Dec. 1986

Loan: Rural Industry and Employment, Nov. 1986
Dec. 1987

G. Staffing

The Mission can live with its FTE levels through FY 86. If one looks at the number of active projects, including centrally-funded, it appears that Mission USDH staffing can begin to be reduced in FY 87.

Active Projects

	<u>FY86</u>	<u>FY87</u>	<u>FY88</u>	<u>FY89</u>	<u>FY90</u>
Emerging Problems of Development II-----					
Science and Technology Development-----					
PVO Co-Financing II-----					
Rural Industries/Employment-----					
Agriculture Technology Transfer-----					(T)
Khon Kaen University-----					(T)
Rural Development Monitoring/Evaluation-----					(T)
Provincial Waterworks Authority-----					(T)
Northeast Rainfed Agriculture Development-----					(T)
Mae Chaem Watershed Development-----					(T)
Seed Development II-----					(T)
Micro-Mini Hydroelectric-----					(T)
Private Sector in Development-----					(T)
Northeast Small Scale Irrigation-----					(T)
Population Planning II-----					(T)
Decentralized Development Management-----					(T)
Agricultural Planning-----					(T)
Rural Primary Health Care-----					(T)
PVO Co-Financing I-----					(T)

An analysis will have to assess the impact of regional offices, RHUDO, RCMO, ACO, PRE and centrally funded projects and their support requirements on the Mission as well as a possible reduction of USDH. A reduction of USDH may require no reduction at all in FSN DH positions.

H. Evaluation Plan - (See Annex I for detail)

<u>FY 1985</u>		
<u>Number</u>	<u>Title</u>	<u>Quarter</u>
493-0312	Northeast Small Scale Irrigation ^{a/}	2
936-5402	Managing Energy and Resource Efficient Cities	2
()	Narcotics/Rural Roads ^{b/}	2
493-0332	Khon Kaen University	2
493-0284	Regional Cities Low Income Shelter	2
493-0297	Hill Area Education	2
493-0308	Northeast Rainfed Agriculture Development	3
493-0305	Malaria and Vector Control	4
493-0329	Private Sector in Development	4
498-0258	ASEAN Agriculture Development Planning Center	4
<u>FY 1986</u>		
493-0294	Mae Chaem Watershed Development	2
493-0315	Decentralized Development Management	3
493-0324	Micro-Mini Hydroelectric	3
498-0279	Small Project Assistance	3
493-0339	Rural Development Monitoring/Evaluation	3
493-0325	Population Planning II	4
493-0304	Renewable Non-Conventional Energy	4
<u>FY 1987^{c/}</u>		
493-0272	Lam Nam Oon Irrigation	-
493-0331	Provincial Waterworks Authority	-
493-0326	Seed Development II	-
493-0337	Agricultural Technology Transfer	-
493-0340	Science and Technology Development	-
493-0341	Emerging Problems of Development II	-
493-0342	PVO Co-Financing II	-
<u>FY 1988^{c/}</u>		
493-0343	Rural Industries/Employment	-

a/ Management review, by consultant, focused on design issues and organizational/management concerns.

b/ Special study of positive/negative effects of rural roads on narcotics trafficking.

c/ Tentative.

I. Centrally Funded Projects

It has been this Mission's experience that all too often the management implications of non-bilaterally funded projects are not considered in manpower planning. We think it important that our AID/W colleagues have some idea of the magnitude and range of centrally funded activities in Thailand for which obligations were incurred in FY 84. We will continue to compile similar data for the ensuing years:

Office of Science & Technology

1. Project Title: Biological Control of Schistosomiasis Transmitting Snails in Southeast Asia
Project No.: 936-5542
Purpose: To investigate variability of host-parasite relationship and find out measures in biological control.
Amount Oblig: \$150,000 (Grant)
Date of Oblig: March 5, 1984
2. Project Title: Heat Sterilization and Accelerated Drying of High Moisture Rice for Safe Storage
Project No.: 936-5542
Purpose: To improve drying process of rice for safe storage.
Amount Oblig: \$150,000 (Grant)
Date of Oblig: May 10, 1984
3. Project Title: Improvement of Bacterial Agents for Control of Mosquito Vectors
Project No.: 936-5542
Purpose: To improve bacterial larvicide by genetic engineering mechanism.
Amount Oblig: \$149,930 (Grant)
Date of Oblig: May 17, 1984

4. Project Title: Utilization of Cassava and Cassava Waste Through Fermentation Technology
Project No.: 936-5542
Purpose: To convert cassava and its waste to alcohol and animal feed.
Amount Oblig: \$144,000 (Grant)
Date of Oblig: May 22, 1984

5. Project Title: Vaccine Trial Center, Mahidol University
Project No.: 931-0453-44-G-SS-4077-00
Purpose: Provide partial support for the establishment of a vaccine trial center at the Faculty of Tropical Medicine, Mahidol University. The center will be responsible for testing vaccines against various tropical diseases prevalent in Thailand.
Amount Oblig: \$200,000
Date of Oblig: September 17, 1984

TOTAL FY 84 Obligations - \$793,930 (Grant)

Office of Private Enterprise and Rural Employment

1. Project Title: MBK-RFM Farmer Outreach Program for Small and Medium Sized Livestock Producers
Project No.: 940-0002.24-G-SS-4076-00
Purpose: To help the Grantee purchase technical advice and services from one or more U.S. or Thai firms to help initiate or implement the Grantee's technical assistance program (Farmer Outreach Program) for the small and medium size livestock producers that will furnish livestock for the Grantee's meat processing facility.
Amount Oblig: \$70,000 (Grant)
Date of Oblig: September 5, 1984

2. Project Title: Thai Livestock Meat Processing Project
Project No.: 940-0002-24 (Loan No. 493-S-040)
Purpose: Financing of constructing, equipment and placing into operation a plant complex consisting of slaughterhouse and meat processing, canning and cold storage facilities. The Project will assist small and medium-size Thai livestock producers by providing additional marketing outlets and technical assistance to improve husbandry practices.
Amount Oblig: \$2,500,000 (Loan)
Date of Oblig: September 5, 1984

ESCAP Grants:

Project Title: Micro-Computers in Support of the Climatic Impact
Assessment Technology for Drought/Disaster Management
Project No.: 493-0000-G-SS-4058-00
Purpose: To provide support to ESCAP for the purchase of micro-
computers in support of the Climatic Impact Assessment
Technology for Drought/Disaster Management Project
Amt. of Oblig: \$79,100
Date of Oblig: August 2, 1984

Project Title: Agroclimatic Workshop on Drought Assessment
Project No.: 493-0000-G-SS-4024-00 (Grant No.)
Amt. of Oblig: \$51,313
Date of Oblig: May 2, 1984

Total: \$130,413 (Grant)

Regional Housing Office

Project Title: Support of PRE/H Program Activities in Asia
Project No.: 940-1001.4
Purpose: Personal Services Contractor for Thailand.
Amount of Oblig: \$119,902
Date of Oblig: September 5, 1984

Project Title: Eastern Regional Organization for Planning and Housing
Project No.: 940-1001.4
Purpose: To assist the EAROPH in the development of a program,
papers and publications.
Amount of Oblig: \$13,000
Date of Oblig: May 31, 1984

Project Title: Support of PRE/H Program Activities in Asia
Project No.: 940-1001.4
Purpose: Consultant for Housing Finance Study in Thailand.
Amount of Oblig: \$4,000
Date of Oblig: May 31, 1984

Project Title: Support of PRE/H Program Activities in Asia
Project No.: 940-1001.4
Purpose: Services for preparation of an operating manual for GHB
(Chulalongkorn University).
Amount of Oblig: \$10,000
Date of Oblig: May 31, 1984

TOTAL - \$146,902 (Grant)

ASEAN Projects:

1. Project Title: ASEAN Agricultural Development Planning Center
Project No.: 498-0258.11
Purpose: To strengthen the agricultural development planning capability of all ASEAN member nations and to apply the acquired expertise in agricultural development planning at regional, national and international levels.
Amount Oblig: \$400,000 - (Grant)
Date of Oblig: January 26, 1984

2. Project Title: Asian Institute of Technology Scholarship Program
Project No: 492-1675
Purpose: To provide for scholarships and research programs for students from the ASEAN nations. This obligation for FY84 will provide for 50 additional scholarships and some special short term training.
Amount Oblig. \$1,000,000 - (Grant)
Date of Oblig. June 25, 1984

TOTAL - \$1,400,000

ASIA Bureau Projects:

1. Project Title: Regional Remote Sensing Training Center
Project No.: 498-0253
Purpose: Grant to the Asian Institute of Technology to help in financing certain foreign exchange and local currency costs of goods and services required for the project.
Amount Oblig: \$400,000 - (Grant) - FY 84
Date of Oblig: June 5, 1984

2. Project Title: Small Project Assistance Program
Project No.: 498-0279
Purpose: To finance small village level activities identified and implemented by Peace Corps Volunteers and selected by the PC Principal Country Representative in Thailand. The program is designed to encourage and support self-help efforts by local communities by funding projects directly.
Amount Oblig: \$40,000 (Grant)
Date of Oblig: May 21, 1984

TOTAL - \$440,000

Appropriate Technology International (ATI) Grants:

1. Project: Protein Enriched Cassava Low Cost Feed for Pig and Poultry
Project No. 840290
Purpose: To develop and commercialize a bio-technology, discovered and researched in Thailand, for the production of stock feed by enriching the nutritional content of cassava up to 25% by using a combination of a mold (*rhizopus oryzae*) and a yeast (*saccharomices cerevisiae*) in a two step solid state fermentation process.
Amount Oblig. \$235,000
Date of Oblig: July 1, 1984

2. Project: Rhizobium Inoculant:Low Cost Technology for Soybean Production
Project No.: Unknown
Purpose: To introduce rhizobium inoculant, a natural bacterium that fixes atmospheric nitrogen in leguminous plants, and gain its acceptance by soybean growers as an integral part of production inputs available to increase soybean production in Thailand.
Amount Oblig: \$135,000
Date of Oblig: April 1984

TOTAL - \$370,000

The following programs committed funds for work in or about Thailand in FY84:

Office of Agriculture

Project Title

1. Seed Program and Industry Development
2. Improved Varieties of Soybeans
3. Peanut Collaborative Research Support Program (CRSP)
4. Improvement of Post Harvest Grain Systems
5. Storage & Processing of Fruits and Vegetables
6. Soil Management Support Service
7. Water Management Systhesis II
8. Pond Dynamics Collaborative Research Support Program

9. Nitrogen Fixation, Symbiotic (NIFTAL)
10. Weed Control Utilization
11. Extension of Small-Scale Agricul. Equipment
12. Water Resources Economics
13. Dryland Management Systhesis
14. Nitrogen Fixation-Limit Factors
15. International Benchmark Sites Network (IBSNAT)

Estimated Total:

721,000

Office of Health, Population and Nutrition

Project Title

1. Association for Voluntary Sterilization (AVS) Projects:
 - a. Family Planning Information Center
 - b. Institutional Support to the Thai Association for Voluntary Sterilization
 - c. F.P. Counseling
 - d. IUD Campaign Assistance
 - e. Quality of VSC Services
 - f. Bangkok Sterilization Clinic
2. Columbia University:
 - a. Resident Advisor in Research and Evaluation
3. Family Health International (FHI):
 - a. Institutional Support and Technical Assistance to the Thai Fertility Research Association

- b. Clinical research support including at present:
 - A Follow-up Study of Campaign IUD Acceptors
 - IUD Perforation Study
 - Female Sterilization Study
 - Study of Reproductive Parameters of Thai Women
 - Study of Long-Term Follow-Up of IUD Acceptors
 - Micro Dose OC's
 - Comparative Trial of Mini IUDs
 - Comparative Study of Standard vs Low-Dose OCs
 - Comparative Trial of ICU 380 Ag IUD vs. ML 375 IUD
 - Preventive Effects of Nox-9 Spermicide on Sexually Transmitted Diseases
 - Study of Infant Mortality and Relationship to Breastfeeding
 - c. Information Dissemination Activities and Conferences
 - d. Short-term Training for Thai Researchers at FHI
 - e. Computer Program Transfer
4. Family Planning International Assistance (FPIA) Projects:
- a. Youth-to-Youth Project
 - b. Family Planning for Bangkok Low Income Communities
 - c. Family Planning for Hilltribes
 - d. Family Planning for Refugees
 - e. VSC for Private Medical Institutes (ASIN)
 - f. Southern Thailand Appropriate Resources and Technical Support (STARTS)
5. Pathfinder:
- a. PDA Asian Training Center Support
6. Population Council:
- a. Technical and financial support for operations research, including the following:
 - Study of VHV/VHCs in Southern Thailand
 - Comparative Analysis of FP Programs in South
 - Joint Study of Norplant 2
 - Study of Reasons for FP Method Switching in Northeast
 - Analysis of Determinants of Fertility

Recommendation No. 3:

"Based on the results of the evaluation, USAID/Thailand should develop criteria for water and road site selection that will encourage the RTG to make optimum use of project resources."

Mission Comments:

Following evaluation of the Land Settlements Project, USAID will develop criteria for water and road site selection for future subprojects that will encourage the RTG to make optimum use of project resources, and which will, at the same time, encourage villagers' participation to the greatest extent in identifying needs.

The evaluation which was recently completed will address the question of criteria for water and road site selection. The final report has not yet been received by the Mission.

The four recommendations on the Northeast Small Scale Irrigation Project audit were received December 14, 1984 and the Mission will respond as required.

K. Measurable Targets

1. Increase expenditures to a level of 28 to 30 million in FY 86.
2. Meet obligation schedules noted in Section 6.
3. Carry out evaluations noted in Section 8.

4. Achieve initial targets as set forth in S&T and Rural Industries project implementation schedules.
5. Assure policy orientation of EPD II Project.
6. Increase funding support of Thai organizations under PVO Co-Financing II Project.
7. Heighten the application of centrally funded project resources to Thai development.
8. Monitor ongoing portfolio to assure completion of projects as scheduled.
9. Demonstrate progress in a policy dialogue with the RTG on Natural Resources Management.
10. Organize and conduct studies leading to the FY 1989-91 CDSS submission.

L. Project Implementation Reports (PIRs)

PROJECT IMPLEMENTATION REPORT (PIR)

Lam Nam Oon Integrated Rural Development Project

Project No. 493-0272

As of September 30, 1984

- A. Last Evaluation: 08/81
- B. Next Evaluation: 10/86
- C. Commitments: \$3,500 (L); \$100 (G)
- D. Implementing Agency: Royal Irrigation Department
- E. Project Description: An integrated approach to increased agricultural production through construction of an irrigation system including roads, on-farm water system and research/extension.
- F. Principal AID Inputs: Irrigation system, road and land improvement--\$1,600 (L); technical assistance--\$1,400 (L), resettlement--\$500 (L); and evaluations--\$100 (G).
- G. Expected Outputs: Irrigation system properly operated and maintained for wet and dry season cropping; community linked closely to agricultural research and extension.
- H. Contractor/Consultants: Louis Berger Int'l Inc.--\$1,400.
- I. Project Status: The extension of the Louis Berger contract has been signed. The Project is now in its final year. The 10 Year Master Plan developed under the Project is highly regarded by RID and is being used for current planning. All participating RTG departments and USAID/Thailand are concentrating attention on improving the organization and performance of water user groups. Training to minimize salinization is being planned.
- Again this wet season the supplemental water provided through the completed portion of the Project irrigation system is preventing retarded growth of the rice crop. This unexpected benefit of the Project will be considered further in the next two months. Need for additional funding or extension of PACD is not anticipated. Pipeline is not a problem for this project. Only \$700 remains unspent which will be expended in FY 86.
- J. Major Actions Over Next 6 Months: Mission will continue efforts to find a dry season crop that will produce needed farmer incentive while continuing to focus on the problems of water user groups.
- K. Project Officer: Richard Flaspohler/Kamol Chantanumate
- L. Mission Director's Assessment: Project is on schedule. No problems.

PROJECT IMPLEMENTATION REPORT (PIR)

Land Settlements Project

Project No. 493-0289

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 10/84
- C. Commitments \$4,000 (L); \$200 (G)
- D. Implementing Agency: Public Welfare Department
- E. Project Description: This project aims to improve the utilization of land in 8 land settlements by providing market roads and developing water resources. Extension and training programs are also included.
- F. Principal AID Inputs: Road and water supply construction--\$3,300; road and water supply A&E costs--\$400 (L); technical assistance--\$100 (L); in-country research support and training--\$200 (L); training and evaluation--\$200 (G).
- G. Expected Outputs: 26,504 land certificates issued, 257,210 kms. of roads constructed; 292 water resources developed; 5,410 farmers and 88 agricultural extensionists trained.
- H. Contractor/Consultants: Expatriate agricultural technical advisor--\$79; Thai agricultural technical advisor--\$46.
- I. Project Status: Request for extension of the project has been submitted by PWD. Road construction at Khamsoi, Lam Nam Oon and Lam Pao Land Settlements and at Non Sang and Ubonrat Dam Resettlements was delayed. Road construction is 93% completed. Water development sub-projects are still going on at Non Sang and Ubonrat Dam Resettlements. The contracts for the agricultural technical advisors were terminated but the extension program is continuing. Training programs provided to extension agents, pilot farmers and leader farmers have been completed. On-the-job training provided for the remaining 149 project farmers will take place in FY 85. The evaluation team will finish its work by the first week of November.
- J. Major Actions Over Next 6 Months: Make decision on a nine-month project extension request. Review of specifications and cost estimates for construction during extension period.
- K. Project Officer: Thongkorn Hiranraks
- L. Mission Director's Assessment: Good progress being made. No problems.

PROJECT IMPLEMENTATION REPORT (PIR)

Rural Primary Health Care Expansion Project
Project No. 493-0291
As of September 30, 1984

- A. Last Evaluation: March 1980
- B. Next Evaluation: N/A
- C. Commitments: \$6,983 million (L)
- D. Implementing Agency: Ministry of Public Health
- E. Project Description: To make primary health care services more readily available to the rural poor. Major components include training of PHC personnel and volunteers, and supporting community-based diarrhea control activities.
- F. Principal AID Inputs:
- | | |
|-------------------------|---------|
| 1. Training | \$4,892 |
| 2. Technical Assistance | \$268 |
| 3. Commodities | \$1,238 |
| 4. Miscellaneous | \$585 |
- G. Expected Outputs: 1. Health personnel trained in PHC program operation; 2. Village PHC workers trained in general as well as specific programs; 3. Community-operated health programs established.
- H. Contractor/Consultants: Personal Services Contractor (9/79 - 4/82)
- I. Project Status: 1. Originally planned training activities were completed.
2. Activities in the reprogramming and add-on phase including community nutrition, diarrheal disease control, rural water supply and sanitation) are underway.
3. RTG and USAID have obligated additional \$2,000 for add-on activities and extended PACD to November 3, 1985.
4. MOPH is requesting revolving funds from the Budget Bureau to finance project activities and will seek reimbursement from AID later on.
- J. Major Actions Over Next 6 Months: 1. MOPH acquires revolving funds from BOB and make transfers of funds to implementing Departments and provinces; 2. Most of the commodities will have to be procured.
- K. Project Officer: Narintr Tima
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Mae Chaem Watershed Development Project

Project No. 493-0294

As of September 30, 1984

- A. Last Evaluation: 06/83
- B. Next Evaluation: 01/86
- C. Commitments: \$6,900 (G)
- D. Implementing Agency: Ministry of Agriculture & Cooperatives
- E. Project Description: To establish a self-sustaining upward trend in real income and access to social services for rural families, with emphasis on the rural poor, while reversing deterioration in environmental quality within the watershed.
- F. Principal AID Inputs: Equipment--\$787; Construction--\$2,282; TA--\$503; Operating Costs--\$1,435; POU--\$1,893.
- G. Expected Outputs: Land terraced (2520 ha.); water resources developed (182 each); land-use certificate issued (4200 households); roads rehabilitated (93 kms.); farm family incomes increase by one hundred dollars per year.
- H. Contractor/Consultants: Two expatriate contractors whose terms have expired. Total of 3 man years at cost of \$140.
- I. Project Status: More than 4000 rai have been terraced; 33 water resource activities completed; 26 kilometers of roads rehabilitated; over 100 land use certificates issued with an additional 300 in process; new POU headquarters completed; extension training centers under construction.
- J. Major Actions Over Next 6 Months: Continue land, water, and road development. Conduct environmental assessment. Issue additional land certificates. Complete baseline survey. Initiate new accelerated crop production programs.
- K. Project Officer: David Delgado
- L. Mission Director's Assessment: Project is on schedule. No problems.

PROJECT IMPLEMENTATION REPORT (PIR)

PVO Co-Financing I

Project No. 493-0296

As of September 30, 1984

- A. Last Evaluation : 05/83
- B. Next Evaluation : N/A
- C. Commitments : \$5,000 (Grant)
- D. Implementing Agency : U. S. and Thai PVOs
- E. Project Description: To support self-help development within the priority sectors of AID assistance which improve the lives of approximately 400,000 of the poor and increase their capacity for their own development.
- F. Principal AID Inputs :
- | | |
|----------------------|---------------|
| Training | \$3,000 (60%) |
| Commodities | \$ 500 (10%) |
| Technical Assistance | \$ 500 (10%) |
| Administration | \$1,000 (20%) |
- G. Expected Outputs : Awarding of 5 PVO grants per year. This will result in approximately 45 sub-projects being completed by the end of the project including 18 projects previously funded under OPGs.
- H. Contractor/Consultant :
1. \$8.5 to conduct two workshops for Thai PVOs in 1980.
 2. \$60 for contracting a PVO consultant in FY 1984.
- I. Project Status :
1. There are 14 ongoing sub-projects.
 2. Two new grants were signed: (1) Population and Community Development Association, "Rain Water Collection and Storage" project for \$150,870, Grant No. 493-0296-G-SS-4055; (2) The Asia Foundation (TAF), "Law School Program" for \$32, Grant No. 493-0296-G-SS-4052.
 3. Two ongoing grants were amended: (1) TAF "Food and Nutrition/Rural Development Center" project Grant No. 493-0296-G-SS-2018, to extend the project life to Sept., 1985 instead of April 1985; (2) Thai Hill-Craft Foundation "Hilltribe Youth Training and Village Development" project, grant No. 493-0296-G-SS-3012, to provide an additional amount of \$2,652 for agricultural development purposes and improvement of the training facilities.
 4. Four Thai PVOs are under registration process.
 5. A PVO consultant has been contracted.
 6. FY 84 obligations completed as planned.
- J. Major Actions Over Next 6 Months : (1) Monitoring and following up of 14 on-going sub-projects; (2) Reminder to PVOs that PVO Co-Fi I activities come to an end on 1/31/86.
- K. Project Officer : Thomas L. O'Connor
- L. Mission Director's Assessment : No issues

PROJECT IMPLEMENTATION REPORT (PIR)
Hill Area Education Project
Project No. 493-0297
As of September 30, 1984

- A. Last Evaluation: 07/82
- B. Next Evaluation: 01/85 (In-house)
- C. Commitments: \$1,600 (Grant)
- D. Implementing Agency: MOE Department of Nonformal Education
- E. Project Description: This project is designed to develop and test a replicable and community-based education-development system which emphasizes community participation to meet existing needs and conditions of hill tribe people.
- F. Principal AID Inputs: Technical Assistance \$357; Local Personnel \$348; Curriculum and Materials Development \$231; Equipment \$139; Administration and Coordination \$125; Staff/Personnel Administration \$286; and Others \$114.
- G. Expected Outputs: An education-development model that can be replicated and expanded nationwide; various models related to Community Education-Development activities; curriculum and Teaching/Learning Materials.
- H. Contractor/Consultants: (1) Florida State University \$153
(2) Personal Services Contractor
-\$162.
- I. Project Status: All HAE Project activities are generally progressing satisfactorily. The administration and coordination of HAE is being gradually integrated into the regular RTG system as expected. At Department and regional levels, the administration and coordination models are 80% complete, with the supervision model 90% complete. Models at provincial and field levels are 65-75% complete. The HAE Project conducted 4 promotional exhibitions. The Office of National Education Commission is conducting a cost analysis of the HAE model. The pre-service teacher training model is complete, tested and in use. Most of the learning materials have been completed, printed and in use. Medical supplies are now the responsibility of the villager committees without any Project funding. Equipment procurement is complete. Even though most project goals have been accomplished, some new goals developed during the course of implementation do require time extension.
- J. Major Actions Over Next 6 Months: The final evaluation of the Project and refinement of all models, curriculum, and learning materials. Decision on project extension for one more year without an increase in USAID funding.
- K. Project Officer: Thomas L. O'Connor
- L. Mission Director's Assessment: No issues

PROJECT IMPLEMENTATION REPORT (PIR)

Renewable Nonconventional Energy

Project No. 493-0304

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 08/86
- C. Committments: \$4,500 (Grant)
- D. Implementing Agency: National Energy Administration (NEA)
- E. Project Description: 1) Institutional development of NEA; 2) establishment of a National Energy Information/Documentation Center; 3) training; and 4) research, adaptation and testing of renewable energy technologies applicable to rural Thailand.
- F. Principal AID Inputs: Technical Assistance (\$2,254); Commodities (\$2,070); Training (\$105); Workshops and Information Dissemination Seminars (\$71).
- G. Expected Outputs: A National Energy Information Center (NEIC) established. A Master Plan for renewable energy completed. Up to 12 renewable energy technologies investigated for possible adaptation to rural Thailand. 20 to 30 individuals trained.
- H. Contractor/Consultants: META Systems, Inc. (\$1,326); Personal Services Contractor - (\$86).
- I. Project Status: The Project essentially was completed on time, (7-1-84) although a 3 month extension was granted for completion of each component's final accomplishment report and an additional one month extension for printing time. Dollars 500,000 was deobligated from the project and reprogrammed for other Mission priorities. The NEIC is operational, as are 4 Regional Energy Centers for promotion of renewable energy technology. Of the 12 renewable energy technologies investigated, one is already being implemented on a larger scale (Micro hydro); 4 appear to have immediate application (Improved Cooking Stove, Improved Charcoal Kilns, Village Woodlots, and Pyrolysis of Rice Husks); 6 appear to have potential but will require additional development and promotion; and one was judged not feasible. All components have completed their final accomplishment reports, and these reports will be printed and distributed widely to institutions and individuals involved with renewable energy technology.
- J. Major Actions Over Next 6 Months: Distribution of above mentioned final accomplishment reports.
- K. Project Officer: John W. Neave
- L. Mission Directors Assessment: No issues

PROJECT IMPLEMENTATION REPORT (PIR)

Anti Malaria Project
Project No. 493-0305
As of September 30, 1984

- A. Last Evaluation: 07/83
- B. Next Evaluation: 07/85
- C. Commitments: Loan \$4,000 - Grant \$500
- D. Implementing Agency: Malaria Division, MOPH
- E. Project Description: The project is designed to reduce morbidity and mortality due to malaria. Major components include capital improvements, training, research, provision of vehicles/equipment, and technical assistance.
- F. Principal AID Inputs:
- | | |
|--|---------|
| (1) Training | \$988 |
| (2) Capital improvements and commodities | \$2,443 |
| (3) Technical assistance | \$185 |
| (4) Others | \$884 |
- G. Expected Outputs:
- (1) Malaria personnel and volunteers trained.
 - (2) Training Center, clinics established.
 - (3) Vehicles, AV materials, equipment provided.
- H. Contractor/Consultants:
- | | |
|----------------|--------------------------------|
| 8/79 - present | : Personal Services Contractor |
| 8/79 - 4/80 | : Personal Services Contractor |
- I. Project Status: As of 09/84, major activities completed include: (1) capital improvements, (2) procurement of commodities and vehicles, (3) jeep overhauls, (4) U.S. and in-country academic training, (5) training of malaria volunteers, (6) establishment of malaria clinics, and (7) most of malaria personnel training. Courses completed in last quarter were (a) refresher training of malaria clinic workers (MCWs), (b) one MCW pre-service course, (c) one Malaria II course, (d) procurement of flipcharts, booklets, promotional films and film strips, and (e) one third-country study tour completed while an other study tour is in progress.
- J. Major Actions Over Next 6 Months: The project will end on 12/31/84. All training activities and technical assistance will be completed.
- K. Project Officer: Narintr Tima
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT

Northeast Rainfed Agricultural Development Project

Project No. 493-0308

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 05/85
- C. Commitments: \$6,700 (L); \$3,700 (G)
- D. Implementing Agencies: Departments and Offices under Ministry of Agriculture & Coops.
- E. Project Description: To establish a replicable agriculture development program for increasing farm productivity and farm incomes particularly among lower income farmers in rainfed agricultural zones.
- F. Principal AID Inputs: Technical Assistance/Administrative Support--\$3,025 (G); Demonstration/Research/Economic Studies--\$675 (G); Construction--\$3,626 (L); Cropping/Farming Systems--\$2,674 (L).
- G. Expected Outputs: Suitable farming practices adapted; extension and agricultural support services provided; development of available water resources; research and demonstration program for rainfed farming systems.
- H. Contractor/Consultants: University of Kentucky--\$1,998
- I. Project Status: The UKy Campus Coordinator will visit the project in December to discuss the transfer of funds from short-term to long-term personnel. Scope of work being drafted for the water resources consultant and for a MIS consultant. A new interpreter/translator was hired in September. Construction of Project Management Center building began in late August, and the bid abstracts for the Tambon Centers were approved. The construction of the RFD nurseries was completed. The cropping systems trials continue as scheduled, but there is still a problem with data reporting and collection, especially that of economists. The economist member of the TA team is working especially hard with OAE to rectify that and the subsequent paucity of economic analysis on the trials.
- J. Major Actions Over Next Six Months: Approval of TA personnel, management and water resources. Meeting with DTEC and NEROAC about UKy contract.
- K. Project Officer: Charles T. Alton
- L. Mission Director Assessment: The project is proceeding as scheduled. The only issue I see is utilization of loan funds which is under review. No problems.

PROJECT IMPLEMENTATION REPORT (PIR)

Emerging Problems of Development (EPD)

Project No. 493-0309

As of September 30, 1984

- A. Last Evaluation: 12/83
- B. Next Evaluation: NA
- C. Commitments: \$5,700 (Grant)
- D. Implementing Agency: DTEC
- E. Project Description: Financial and technical support to improve RTG policy formulation, program planning, and pre-project analysis in key development areas.
- F. Principal AID Inputs: Technical Assistance (\$4,440); Training (\$753); Other Costs, including Evaluation and Contingencies (\$507).
- G. Expected Outputs: Systematized problem identification, policy formulation and setting of national priorities, and improved overall RTG management of the development process.
- H. Contractor/Consultants: Public Administration Service (\$1,747); Foster Wheeler (\$1,000); SEATEC International (\$288); Personal Services Contractor (\$213); others less than \$100.
- I. Project Status: 20 technical consultancies completed, seven ongoing and seven under planning. 268 persons have received training under academic programs, through on the job training or in seminars and workshop sessions. Additional programs being developed. \$600 special set-aside for S&T activities. Follow-on EPD II Project planned.
- J. Major Actions Over Next Six Months: Accelerate implementation in view of 06/85 PACD. Complete PP and obligate follow-on EPD II.
- K. Project Officer: Thomas E. Johnson
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Northeast Small-Scale Irrigation Project

Project No. 493-0312

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 01/86
- C. Commitments: \$5,800 (L); \$2,800 (G)
- D. Implementing Agency: Royal Irrigation Department
- E. Project Description: To develop a replicable system of on-farm irrigation which includes assistance in water management, organized maintenance, improved agricultural practices, organized research and extension at several of 200 existing reservoirs, without developed command areas, in NE Thailand.
- F. Principal AID Inputs: Loan inputs for construction/rehabilitation, service centers, O&M and staff support--\$5,800 (L). Grant inputs for technical support, research, marketing studies and evaluation--\$2,800 (G).
- G. Expected Outputs: Outputs: three farmer-operated and maintained irrigation systems providing improved cropping patterns and significantly increased incomes for farmers, replicable throughout Northeast Thailand.
- H. Contractor/Consultants: Parson's Overseas Inc.--\$1,800
- I. Project Status: All necessary approvals for continuation of the Project were forthcoming over the final quarter of FY'84. The RTG plans to shift funds from other activities to carry out at least partial work on all seven original sites. USAID/Thailand has forwarded concurrence in FY 85 Financial and Implementation Plans. Contracts for construction of three command area systems totaling \$3,500 over FY 1985-86 have been awarded and signed. Construction contracts for work to begin in late 1984 total \$3.5 million and will, by mid-1986, represent expenditure of three-fourths of the loan funds.
- J. Major Actions Over Next 6 Months: Decision on extension (time and scope) on consultant (host country) contract should be made by the end of January, 1985. USAID must determine & formally notify RTG of disposition toward remaining four sites.
- K. Project Officer: Richard Flaspohler/Kamol Chantanumate
- L. Mission Director's Assessment: While the project is proceeding fairly well on the three sites, there remains the issue of a fourth site. We anticipate resolving the issue by the end of the third quarter. Minor problems.

PROJECT IMPLEMENTATION REPORT (PIR)

Decentralized Development Management Project (DDMP)

Project No. 493-0315

As of September 30, 1984

- A. Last Evaluation: 06/84
- B. Next Evaluation: 06/86
- C. Commitments: \$7,500 (L), \$3,100 (G)
- D. Implementing Agency: Office of the Prime Minister
- E. Project Description: To find appropriate models and approaches for strengthening capacities of Tambon organizations, RTG and private sector support systems at provincial, district, and local levels.
- F. Principal AID Inputs:
- | | |
|-------------------------------------|---------|
| 1) Technical Assistance | \$2,276 |
| 2) Technical Support | \$346 |
| 3) Specialized Assistance and Misc. | \$478 |
| 4) Financing of local projects | \$7,500 |
- G. Expected Outputs: Operational models designed to strengthen capacity of Tambon organizations, improve RTG support systems at provincial, district, and local levels, and improved M/E system for rural development.
- H. Contractor/Consultants:
DAI - \$564; PDA - \$820; A&R - \$817.
- I. Project Status:
- 1) Project objectives clarified by Minister Meechai during seminar in Khon Kaen on 7/7/84;
 - 2) Mission Project Evaluation Report Review held on 9/5/84.
 - 3) Project workplan and FY-85 budget completed 9/5/84 and workplan approved on September 12, 1984.
- J. Major Actions Over Next 6 Months:
- 1) Disbursement of FY-85 loan funds (\$3,269);
 - 2) Mission Review of DDMP financial procedures;
 - 3) Completion by TAT of studies and approved experiments initiated.
- H. Project Officer: Joseph Salvo
- I. Mission Director's Assessment:
No major conceptual issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Agricultural Planning Project

Project No. 493-0317

As of September 30, 1984

- A. Last Evaluation: 07/84
- B. Next Evaluation: N/A
- C. Commitments: \$3,200 (G)
- D. Implementing Agency: Office of Agricultural Economics (OAE)
Ministry of Agriculture & Coops (MOAC)
- E. Project Description: The project focuses on OAE and improving its capabilities in policy planning, data collection and presentation, project and budget review, coordination and monitoring.
- F. Principal AID Inputs: Technical Assistance--\$2,134; Commodities--\$260; Training/Travel--\$672; and Evaluation/Miscellaneous--\$134.
- G. Expected Outputs: Improved planning and policy analysis management. Better cooperation between OAE and MOAC line departments for project identification, project preparation and budget analysis. Improved system of collection and processing of socio-economic data relative to the rural sector.
- H. Contractor/Consultants: Iowa State University--\$2,027.
- I. Project Status: Some positive organizational changes have taken place. Most important is the change in emphasis from extensive use of "complex analytical models" to more emphasis on a "commodity" oriented analysis. Additional organizational changes are likely as the project contractor evaluates OAE's organization and management structure. FY 85 Implementation/Financial Plans have been received, reviewed and concurred in by USAID. A total of 14 OAE staff are working on or have completed advanced degrees. Specialized training continues. \$260 worth of equipment will be purchased by the end of FY 85. A pipeline analysis indicates approximately \$200 may be available for deobligation by the end of the project. Mission is taking action on several recommendations made by a recent evaluation. The project will terminate in October 1985 as scheduled.
- J. Major Action Over Next 6 Months: Complete procurement of project equipment; Finalize actions to be taken vis-a-vis the recent project evaluation; and consider possible deobligation of approximately \$200 at the end of the project.
- K. Project Officer: John A. Foti
- L. Mission Director Assessment: The project while experiencing problems in the past, is now proceeding reasonably well.

PROJECT IMPLEMENTATION REPORT (PIR)

Micro Mini Hydroelectric
Project No. 493-0324
As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 05/86
- C. Commitments: \$8,000 (Loan), \$100 (Grant)
- D. Implementing Agency: National Energy Administration (NEA)
- E. Project Description: To assist NEA to develop an analytical capacity to improve their site selection planning and analysis, and to finance construction of up to twelve micro/mini hydroelectric generating systems in various parts of Thailand.
- F. Principal AID Inputs: Engineering Design (\$387); Construction (\$3,672); Power Plants (\$2,054); Technical Assistance (\$967); Evaluation (\$100).
- G. Expected Outputs: OJT and TA provided will improve NEA's skills in engineering, contracting, environmental and socio-economic analyses. A socio-economic model will be developed for site-selection, and up to twelve micro/mini hydro plants will be constructed.
- H. Contractor/Consultants: TEAM-KEC (Thai Consultants) (\$289)
Stanley Consultants, Inc. (U.S.A.) (\$644)
- I. Project Status: Construction bids were received, evaluated and contracts awarded for the (a) Civil Works on the Nam Mae Hat Sub Project (\$760,870), (b) Transmission Lines for 3 sub projects and (c) Construction Camps for 5 sub-projects. Construction activities will begin in November, the start of the dry season.

Detailed engineering design was estimated at 75% complete on 2 additional sub-projects, and field topographic surveys, layout, hydrologic and other field investigations continued on 3 more sub-projects. A prequalification notice for hydroelectric power generation equipment (turbine - generators) was cabled to the CBD. Socio-economic baseline data for the first three sub-projects has been processed and the analysis is nearly complete. Initial load forecasting computer programs have been developed and run out, detailed engineering implementation schedules for the first six sub-projects have been drawn up, and development of the integrated analytical site selection model has commenced.

The implementation schedules that were developed as noted above, have established that the start-up, testing and operation of the first six sub-projects will begin in October, 1986.

J. Major Actions Over Next 6 months: Civil construction should be under way on four sub-projects, construction bidding underway on two sub-projects, and equipment bidding under way for all six sub-projects. Engineering design under way for second group of six sub-projects.

- K. Project Officer: John W. Neave
- L. Mission Directors Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Population Planning II Project

Project No. 493-0325

As of September 30, 1984

- A. Last Evaluation: 7/84
- B. Next Evaluation: 7/86
- C. Commitments: \$6,100 (G) - \$9,868 (L)
- D. Implementing Agency: Ministry of Public Health
- E. Project Description: To assist the RTG in maintaining, extending and strengthening family planning information and services nationwide, with particular emphasis on the sub-district level and low performance provinces and districts.
- F. Principal AID Inputs:
- | | |
|--------------------------------------|-------------------------|
| (1) Training | \$1,980(L) |
| (2) Commodities | \$3,503(G) - \$3,960(L) |
| (3) VSC and IUD support and services | \$2,248(G) - \$3,032(L) |
| (4) Misc. (research, etc.) | \$2,766(G) - \$896(L) |
- G. Expected Outputs: (1) 5.3 million new acceptors and 4.2 million active users by EOP. (2) 500 nurse-midwives and 1,520 auxiliary midwives trained and providing IUD services (3) Orals & condoms available at all 7,118 NFPP outlets.
- H. Contractor/Consultants: (1) NIDA \$152
(2) Westinghouse Health Sytem \$64
(3) Long term PSC from Columbia Univ. \$49
- I. Project Status: The 3rd Year (FY 1985) Project Implementation Plan has been submitted to USAID for approval. Major recommendations of actions/activities of the recently completed mid-term project evaluation are incorporated into the Plan. Some of the most significant include development of provincial-level needs assessments and training plans, support for provincial-level MOI promotional activities, support for studies and a national conference for development of the Sixth Five Year Economic and Social Development Plan, and a reprogramming of project funds to support a hilltribe family planning project.
- J. Major Actions Over Next 6 Months: Implementing project activities described in the Project's 3rd Year Implementation Plan.
- K. Project Officer: Patricia Moser, Karoon Rugvanichje
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Seed Development II Project

Project No. 493-0326

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: N/A
- C. Commitments: \$100 (G); \$6,100 (L)
- D. Implementing Agency: Seed Division, Department of Agricultural Extension, MOAC
- E. Project Description: Develop a comprehensive seed program that efficiently and cost-effectively increases farmers' use of higher quality seed while steadily increasing the role of the private sector to supply this seed.
- F. Principle AID Inputs: Technical Assistance--\$1,305 (L); Training in U.S.--\$907 (L); Working Capital Account Funds--\$1,000 (L); Equipment--\$2,888 (L); Evaluation--\$100 (G).
- G. Expected Outputs: Personnel trained in management and seed technology; 8 MS degrees awarded; Working Capital Account fully funded with a pricing structure adequate to cover costs; seed processing facilities staffed, equipped and operating.
- H. Contractor/Consultants: Mississippi State University--\$1,252.
- I. Project Status: The MSU Contract is scheduled to terminate on June 30, 1985 but negotiations for a 2-year extension are underway. Existing project funds are sufficient for a 2-year extension which will be for approximately \$750. The Seed Club of Thailand was created in 1982 by a group of RTG officials, private sector, technicians and farmers. At present the Club has 231 members. In-country training continued as scheduled. A total of five officials from Seed Division attended the Management Intern Training at different U.S. private seed companies under ICD sponsorship. Contracts for the procurement of seed processing equipment were awarded to the six successful bidders and sent for signature.
- J. Major Actions over Next Six Months: Commitment of \$2,350 in October, 1984 for procurement of seed processing equipment. Issuance of Direct Letter of Commitment to the six successful suppliers.
- K. Project Officer: Uoychai Vattraphoudej
- L. Mission Director Assessment: The project is on schedule. No problems.

PROJECT IMPLEMENTATION REPORT (PIR)

Affected Thai Program - ESF
Project No. 493-0327
As of September 30, 1984

- A. Last Evaluation: NA
- B. Next Evaluation: NA
- C. Commitments: \$19,000 (Grant)
- D. Implementing Agency: NESDB/Supreme Command
- E. Project Description: Contribution to a special RTG program which combines RTG and other donor contributions for the purpose of stabilizing rural Thai communities along Thailand's borders with Kampuchea and Laos.
- F. Principal AID Inputs: Cash contribution (\$19,000) to restore homesites, build or repair roads, provide community health systems, schools, adult skills training and other services to communities disrupted by border strife.
- G. Expected Outputs: Improved living conditions for Thai residents of these communities, numbering some 200,000 people, adversely affected by recurring civil strife and refugee inflows.
- H. Contractor/Consultants: N/A
- I. Project Status: Along the Kampuchean border, in 1984, 51 village communication systems were installed, 144 village halls constructed, 136 kms. of irrigation systems built, 102 kms of roads repaired, 10 dams and 23 children's playgrounds built, rice seed provided to 1500 families, 21 water wells drilled, 21 kms of roads constructed, 150 village volunteers trained in forest protection and livestock development, and construction of land and water conservation systems was carried out in 30 villages. Along the Lao border, 44 fish ponds were constructed, water and soil conservation systems were constructed on 23,750 rai of land, 8 shallow wells drilled, 5 ferro concrete bridges built, 5 irrigation pumps installed, 60 teachers trained, 9 irrigation reservoirs and 1 dam constructed, 70 village development volunteers trained, 40 kms. of roads constructed, and communications systems were installed in 121 villages.
- J. Major Actions Over Next 6 Months: Reimburse \$417,478 for activities completed in Thai FY 84. Prepare PAAD and amend Project Agreement to add Dollars 5,000 for FY 1985 program.
- K. Project Officer: Thomas E. Johnson
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Private Sector in Development

Project No. 493-0329

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 10/84 (Partial)
- C. Commitments: \$3,500 (G)
- D. Implementing Agency: BOI/ATI/TCC/NESDB
- E. Project Description: To increase private sector investment in employment generating, export oriented, and resource based ventures outside of Bangkok, the project will provide TA to BOI and staff and studies support to JPPSCC and TJACC.
- F. Principal AID Inputs: Investment analysis and promotion (\$2,551); strengthening private sector dialogue (\$460); US/Thai private sector linkage (\$75); evaluation (\$65); and contingency (\$349).
- G. Expected Outputs: 1) Increased private investment, 2) sustained and systematic presentation to RTG of recommendations by the organized private sector on public policy and actions directly affecting the development of private enterprise.
- H. Contractor/Consultants: Arthur D. Little Inc., (\$2,283)
- I. Project Status: Arthur D. Little Inc. signed contract with DTEC on September 27, 1984 to provide technical assistance to BOI for period 10/7/84 to 12/31/86. The first AID funded study under the project was completed in August, 1984. Proposals for studies on RTG procurement policy and procedures, the impact of taxation of interest on deposits in commercial banks, and the privatization of duty free shops were approved in principle by the Project Committee.
- J. Major Actions Over Next 6 Months: Approve mobilization payment to Arthur D. Little Inc. in accordance with terms of the contract. Assist development of TORS for studies. Assist JACC Evaluation.
- K. Project Officer: Jeffrey W. Evans
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

PWA Institutional Development

Project No. 493-0331

As of September 30, 1984

- A. Last Evaluation: None
- B. Next Evaluation: 01/87
- C. Commitments: \$5,700 (L)
- D. Implementing Agency: Provincial Waterworks Authority
- E. Project Description: The purpose of this project is to enhance the institutional capacity of PWA to plan, design, manage, operate and maintain its water supply systems effectively.
- F. Principal AID Inputs:
- | | |
|--|---------|
| (1) Technical Assistance | \$2,814 |
| (2) Commodities | \$1,924 |
| (3) Evaluation and innovative activities | \$341 |
| (5) Miscellaneous | \$621 |
- G. Expected Outputs: (1) Personnel at all levels trained in respective areas of planning, administration and plant maintenance/operation.
(2) Institutional development system established.
- H. Contractor/Consultants: (To be identified)
- I. Project Status: The project is still in its initial stage. All initial conditions precedent have been met on time. Contracting for technical assistance is underway. Bidders were prequalified. PWA is finalizing the RFTP which will be forwarded to USAID for concurrence in early November. The proposed commodity procurement plan has also been submitted to USAID for approval.
- J. Major Actions Over Next 6 Months: (1) Issuance of RFTP, reviewing/evaluating technical proposals and awarding a contract for technical assistance. (2) Procurement of commodities required for year 1 implementation.
- K. Project Officer: Narintr Tima
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Khon Kaen University Research Development Project

Project No. 493-0332

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 01/85
- C. Commitments: \$2,000 (G)
- D. Implementing Agency: Research Development Institute,
Khon Kaen University
- E. Project Description: The project aims to strengthen the institutional capacity of Khon Kaen University (KKU) to conduct research appropriate to the development of Northeast rural communities.
- F. Principal AID Inputs: Farming systems and rural development research--\$1,500; Core activities--\$57; U.S. and local TA--\$275; Training, workshops, publications, and evaluation--\$168.
- G. Expected Outputs: Five RDI staff trained and in place; RDI staff supporting and coordinating research; university faculty and students conducting research on at least 70 research topics.
- H. Contractor/Consultants: None thus far. Some short term consultants planned for FY 85.
- I. Project Status: FY 85 Implementation and Financial Plans have been approved. The plan requires \$229 and \$202 to support Farming Systems and Rural Development Research projects. Three pm of U.S. technical assistance have been requested for FSR, RDI and ADRC (Agricultural Development Research Center project financed by the Japanese). Currently there are 10 RDR projects and 11 FSR sub-projects being carried out under the project. RDI expects to finance at least 10 RDR projects and 24 FSR sub-projects in FY 85. Early in September, RDI was successful in arranging a workshop on Rural Northeast Problems and the Direction of Research for KKU's Academic Staff. USAID approved the contract extension of the Management Consultant for 3 months ending in November, 1984.
- J. Major Actions Over Next 6 Months: Review the scopes of work of the U.S. TA Consultant; assist the RDI in forming an in-house evaluation team.
- K. Project Officer: Thongkorn Hiranraks
- L. Mission Director's Assessment: The project is proceeding as scheduled. No problems.

PROJECT IMPLEMENTATION REPORT

Agricultural Technology Transfer

Project No. 493-0337

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: N/A
- C. Commitments: \$4,500 (L); \$500 (G)
- D. Implementing Agency: Ministry of Agriculture and Cooperativess (MOAC)
- E. Project Description: The project's objective is to accelerate the MOAC's capacity to identify, introduce and manage modern agricultural technology needed to increase yields, production and farm income.
- F. Principal AID Inputs: Technical Assistance--\$500 (G); Project Activities Support--\$2,500 (L); Commodities--\$1,500 (L); and Limited Training/Miscellaneous--\$500 (L).
- G. Expected Outputs: Improved production packages; improved quality/quantity research and extension; better understanding of existing production and marketing constraints; and closer cooperation between RTG agencies and the private sector.
- H. Contractor/Consultants: One long term PSC, several short term consultants as required.
- I. Project Status: The project agreement was recently signed (September 20, 1984). PIL's Nos. 1 and 2 have been sent to the RTG providing guidance in addressing project CP's. It is expected that CP's for initial disbursement will be completed by early November. A project implementation workshop is planned for mid-October to formulate FY 85 Implementation/Financial Plans and to finalize CP requirements.
- J. Major Actions Over Next 6 Months: Approve FY 85 Implementation/Financial Plans; and assist in the procurement of equipment and commodities.
- K. Project Officer: John A. Foti
- L. Mission Director's Assessment: The project is proceeding as scheduled. No problems.

PROJECT IMPLEMENTATION REPORT (PIR)

Rural Development Monitoring and Evaluation Project (RDME)

Project No. 493-0339

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 6/86 (In House)
- C. Commitments: \$5,000 (Loan)
- D. Implementing Agency: NESDB/NRDCC
- E. Project Description: The project will assist NRDCC/NESDB in developing institutional capabilities for strengthening central and field level M&E functions of rural development programs in the poverty alleviation areas.
- F. Principal AID Inputs: Technical assistance (\$1,340); training (\$1,147); commodities (\$693); operations and maintenance (\$236); evaluative studies (\$927); and evaluations (\$100).
- G. Expected Outputs: Data collection and flow systematized, data processing steps implemented, RPAP effect assessments undertaken, evaluative studies implemented, and institution-building steps completed.
- H. Contractor/Consultants: N/A
- I. Project Status: All conditions precedent to initial disbursement have been met. A host country contract to provide expatriate technical assistance and overseas training program is expected to be executed by NESDB and BUCEN by the end of December, 1984. However, divergent views on some negotiating points exist which could cause a delay. All 15 academic and 10 technical participants have been identified; most of them have taken English language tests. Loan-funded staff and consultants hiring, commodities procurement, system operations, local staff training, and evaluative studies will begin after Chief of technical assistance team arrives in Thailand.
- J. Major Actions Over Next 6 Months: Approve draft host country contract to be executed between BUCEN and NESDB. Approve \$653,304 advance to NESDB for local costs. Approve off-shore and shelf-item procurement.
- K. Project Officer: Det Trisahd
- L. Mission Director's Assessment:

Must monitor closely the progress of negotiations of proposed BUCEN host country contract with NESDB.

PROJECT IMPLEMENTATION REPORT (PIR)

Housing Policy and Assistance Program - Housing Guaranty (HG)

Project No. 493-HG-003 (a) and (b)

As of September 30, 1984

- A. Last Evaluation: 05/81
- B. Next Evaluation: 12/84
- C. Commitments: \$40,000 (Housing Guaranty Loan)
- D. Implementing Agency: National Housing Authority (NHA)
- E. Project Description: Assist the NHA in strengthening its institutional capacity to provide affordable housing for the poor to promote more private sector low cost housing, and to help the RTG implement its adopted national housing policy.
- F. Principal AID Inputs: Guaranty of \$40 million in long-term loans from U.S. financial institutions to fund slum upgrading, sites and services, and core houses in Bangkok and 20 regional cities. TA programs support also provided.
- G. Expected Outputs: Improved living conditions for 46,000 families in Bangkok slum areas, provision of 42,000 serviced sites with core houses affordable by low-income households in regional cities and Bangkok, implementation of National Housing Policy.
- H. Contractor/Consultants: Personal Services Contractor - (\$150,000) (completed 12/83); various short-term consultants.
- I. Project Status: NHA borrowed \$10 million in November 1983 to finance part of its 1979-84 development program. Remaining projects are nearing completion, which will substantially increase NHA's eligible costs for HG loan reimbursement. Several new projects are underway, but land acquisition problems continue to cause delays. HG 003(a) has \$5 million remaining to be disbursed of the original \$15 million. HG 003(b) for \$25 million was authorized in June 1984. Intensive TA will be needed to implement NHA private sector joint venture project and cooperative housing project, especially if ADB loan and related TA are not executed (uncertain at this time).
- J. Major Actions Over Next 6 Months: Negotiate and sign I.A. for HG-003(b). Fund NESDB's Bangkok Region studies on public finance and housing needs. Provide TA to NHA on private sector and housing coop projects. Conduct evaluation of 1981-84 IIPUP funded technical assistance.
- K. Project Officer: Philip-Michael Gary
- L. Mission Director's Assessment: Project is proceeding satisfactorily and no problems are noted.

PROJECT IMPLEMENTATION REPORT (PIR)

Asian Regional Remote Sensing Training Center (ARRSTC)

Project No. 498-0253

As of September 30, 1984

- A. Last Evaluation: 06/83
- B. Next Evaluation: N/A
- C. Commitments: \$4,510
- D. Implementing Agency: Asian Institute of Technology
- E. Project Description: The purpose of this project is to establish an internationally recognized ARRSTC at AIT, fully utilized and supported by the region's countries, to provide training and other services to user agencies.
- F. Principal AID Inputs:
- | | |
|----------------------------|---------|
| 1) Technical Assistance | \$1,843 |
| 2) Commodities | \$2,556 |
| 3) Training | \$500 |
| 4) Misc. (outreach travel) | \$362 |
- G. Expected Outputs:
- 1) Staffing of the Center
 - 2) Establishment of a Data Bank
 - 3) Establishment of visual and digital analyses systems
 - 4) Training and outreach activities
- H. Contractor/Consultants:
- | | |
|---------------------------|---------|
| 1) 5 Long Term PSCs | \$1,251 |
| 2) Short Term Consultants | \$592 |
- I. Project Status:
- 1) The Center is fully staffed.
 - 2) The equipment for the Center worth \$1,500 has been procured and the procurement of remaining \$1,000 equipment is underway.
 - 3) A total of 116 trainees from 16 ESCAP countries, including Her Royal Highness Princess Maha Chakri Sirindhorn of Thailand, have received training through the ARRSTC. AIT is planning to offer a one-year diploma program in remote sensing and a degree program in the area of "Integrated Management of Natural Resources" with remote sensing its focal points in the near future. AIT is actively seeking support of its donors for this new initiative. The integration of the ARRSTC into AIT is virtually assured.
 - 4) A total of \$4,500 out of a total planned Grant amount of \$5,600 has been obligated to date. There is an additional need for \$700 to complete all planned activities under the project.
- J. Major Actions Over Next 6 Months:
- 1) Obligation of \$700 before December 31, 1984.
 - 2) Procurement of the remaining project equipment and commodities.
- K. Project Officer: Basharat Ali
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

Small Project Assistance Program (Peace Corps)

Project No. 498-0279

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 04/86
- C. Commitments: \$40
- D. Implementing Agency: Peace Corps/Thailand
- E. Project Description: To support self-help efforts by local communities by financing small village level activities proposed by Peace Corps Volunteers (PCVs) and selected by the Peace Corps Principal Country Representative in Thailand.
- F. Principal AID Inputs: Commodities \$40 (100%)
- G. Expected Outputs: The support of approximately 80 activities by around 60 PCVs ranging in size up to a maximum of \$2.2 per activity (\$4.3 for rural public works activities).
- H. Contractor/Consultants: N/A
- I. Project Status: There are 26 ongoing activities by PCVs funded at \$11.2. These include pig, chicken, and buffalo breeding and raising, vegetable growing, pump building, malaria control, garbage disposal, and beekeeping. The first 9 projects were funded at PC request in August 1984, 17 projects were funded in September 1984. Approval and monitoring of individual activities is performed by PC/Thailand.
- J. Major Actions Over Next 6 Months: Continuation of project proposals, approvals, funding, and implementation.
- K. Project Officer: Richard L. Hopkins
- L. Mission Director's Assessment: No issues.

PROJECT IMPLEMENTATION REPORT (PIR)

ASEAN Agricultural Development Planning Center Project

Project No. 498-258.11

As of September 30, 1984

- A. Last Evaluation: N/A
- B. Next Evaluation: 07/85
- C. Commitments: \$3,000 (G)
- D. Implementing Agency: ASEAN Agricultural Development Planning Center (AADPC)
- E. Project Description: Purpose is to establish an AADPC to provide agricultural development planning expertise; serve as regional data bank for agricultural information; train government personnel; construct and verify regional planning models; and undertake studies on ASEAN agricultural policies.
- F. Principal AID Inputs: Technical Assistance--\$81; Training--\$819; Operation and Maintenance--\$236; Commodities/Equipment--\$322; Salaries/Honoraria--\$786; Planning/Research--\$421; and Others--\$335.
- G. Expected Outputs: Establishment of center; establishment of a regional data base; on-going relevant training and research activities.
- H. Contractor/Consultancies: Short term consultants as required.
- I. Project Status: The Center is fully operational and has been since August 1980. The project was recently extended for one additional year to May 1986. A total of 164 ASEAN trainees have been trained, 37 at the Master degree level, 51 in specialized courses of up to 6 months, and 70 in specialized one week courses in quantitative methods. The Center continues to do specialized regional research at the request of the ASEAN Ag ministers. All project equipment has been purchased. AADP Center offices renovated and a 50-room dormitory constructed.
- J. Major Actions For Next 6 Months: Prepare scope of work for June 1985 evaluation. Approve FY 85 Implementation/Financial Plan. Approve replacement for the AADPC Director whose term of service terminates in November.
- K. Project Officer: John A. Foti
- L. Mission Director's Assessment: The project is proceeding as scheduled. No problems.

ANNEX I

Summary of FY 85 Evaluation Plan

1. Evaluation: Northeast Small Scale Irrigation (NESSI)
Project No: 493-0312
Planned Date: 2nd Qtr - FY 85
Est. Eval. Cost - \$15,000
Funding Source: Project Funds
Comments: Mission plans to conduct a management review of this project. The review will critically examine basic project premises regarding design and also the organizational/management capacities of the implementing agency. For this review, Mission anticipates bringing in outside assistance to interact with high level RTG counterparts. Project funds are expected to cover the costs.

2. Evaluation: Managing Energy and Resource Efficient Cities
Project No: 936-5402
Planned Date: 2nd Qtr - FY 85
Est. Eval. Cost - \$4,000
Funding Source: Originally planned PD&S funding, however these funds not approved in AID/W approved PD&S budget.
Comments: Mission plans to conduct a mini-evaluation of project focused on its impact on decentralized (local) development and implications for future programs.

3. Evaluation: Narcotics/Rural Roads
Project No: N/A
Planned Date: 2nd Qtr - FY 85
Est. Eval. Cost - \$25,000
Funding Source: PD&S (Approved)
Comments: In view of the significant level of other donor activity in Northern Thailand and USAID's Mae Chaem Project, an evaluation is planned to assess the positive (or negative) effects of rural roads construction on narcotics production/trafficking. This is seen as a joint effort and currently are exploring the participation of all major donors to the crop substitution program.

4. Evaluation: Khon Kaen University Project
Project No. 493-0332
Planned Date: 2nd Qtr - FY 85
Est. Eval. Cost - Unknown at this time
Funding Source: Project Funds
Comments: In-house management review to look at procedures.

5. Evaluation: Regional Cities Low Income Shelter and Community Development
Project No. 493-0284
Planned Date: 2nd Qtr - FY 85
Est. Eval. Cost - \$8,000
Funding Source: PD&S (Approved)
Comments: An ex post facto evaluation is planned for November/December 1984 to document lessons learned from this demonstration effort to complement the provision of low-cost housing with social/economic services and community facilities. Evaluation will be useful in the design of future Thailand projects regarding housing and community development.

6. Evaluation: Hill Area Education
Project No: 493-0297
Planned Date: 2nd Qtr - FY 85
Est. Eval. Cost -
Funding Source: Project Funds
Comments: Scheduled evaluation. Agreed in principle for one year extension of project with new PACD of 3/86.

7. Evaluation: Northeast Rainfed Agriculture Development (NERAD)
Project No: 493-0308
Planned Date: 3rd Qtr - FY 85
Est. Eval. Cost: \$50,000
Funding Source: Project Funds
Comments: Mid-term assessment of impact trends of project interventions on beneficiaries.

8. Evaluation: Malaria and Vector Control
Project No: 493-0305
Planned Date: 4th Qtr - FY 85
Est. Eval. Cost - \$25,000
Funding Source: PD&S (Approved)
Comments: Project ends 12/30/84. Ex post facto evaluation is planned to (1) Confirm the decline in malaria incidence earlier identified in July 83 evaluation; (2) Determine to what extent the decline was due to USAID project inputs; (3) Determine extent to which project activities have brought about desired institutional change; and (4) Determine further needs of MOPH for external assistance (if any) given persistent parasite resistance to drugs and changing vector behavior.

9. Evaluation: Private Sector in Development
Project No: 493-0329
Planned Date: 4th Qtr - FY 85
Est. Eval. Cost - \$35,000
Funding Source: Project Funds
Comments: As part of evaluation of Mission's own private sector project, plan to review private sector aspects of Seeds II (493-0326) and Lam Nam Oon (493-0272). In addition, will incorporate results of PRE assessment of Siam Commercial Bank (940-0012) and IMET (940-0072) in overall review. Several other centrally funded activities may be included. Final decision not yet reached.

10. Evaluation: ASEAN Agricultural Development Planning Center
Project No: 498-0258
Planned Date: 4th Qtr - FY 85
Est. Eval. Cost - \$20,000
Funding Source: Project Funds
Comments: Project extended to May 1986. Evaluation is planned to examine (1) Whether training activities of Ag Development Training Center should receive added funding; (2) Institutionalization of regional data bank; (3) Regional planning models for selected pilot areas in each country; and (4) Coordination/harmonization of ASEAN policies through studies supported by project.

Following special studies, not evaluations, also planned for FY 85 as follows. Also note Workshop planned (Item 3).

1. Lam Nam Oon On-Farm Development - Water Users Group Study
Project No: 493-0272
Planned Date: 3rd Qtr - FY 85
Est. Cost - \$40,000
Funding Source: PD&S (Approved)
Comments: Recent project reviews have stressed the problem of water users group (WUG) formation and continuation as central to successful installation and maintenance of the irrigation system. Currently, less than 15 percent of irrigated area is being utilized for dry season cropping. Although some of the difficulties experienced are of an engineering nature, the single most important problem identified consistently in all reports is WUG formation and consequent lack of cooperation in the creation of on-farm distribution systems. Mission plans to undertake research study to WUG formation, in which team members will physically reside in selected villages for extended period. Proposed research study also has important implications for user groups being organized under Northeast Small Scale Irrigation Project (493-0312) and for future RIG policy formulation.

2. Health Consequences of Rural Industrialization/Urbanization
Project No: N/A
Planned Date: 3rd Qtr - FY 85
Est. Cost - \$50,000
Funding Source: PD&S (Approved)
Comments: Mission plans to undertake a special study to investigate health effects of the increasing modernization of Thailand's economy. Study's focus will be on occupational and environmental implications concerning the risks (and potential costs in health care occupational safety and environmental preservation) of accelerated rural industrialization and urban development.

3. Renewable Non-Conventional Energy
Project No: 493-0304
Planned Date: 2nd Qtr - FY 85
Est. Cost - \$8,500
Funding Source: PD&S originally sought for this, however these funds not approved in AID/W approved PD&S budget.
Comments: Technical workshop to evaluate and discuss accomplishments of project and to disseminate/commercialize the technologies developed. Participating will be representatives from various institutions, including the private sector, individuals and mass media.

Summary of FY 86 Evaluation Plan

1. Evaluation: Mae Chaem Watershed Development
Project No: 493-0294
Planned Date: 2nd Qtr - FY 86
Est. Eval. Costs - Unknown at this time
Funding Source: Project Funds
Comments: Project will be evaluated to determine whether the 1983/84 management reorganization has improved project performance and also to better forecast RTG's future role in terms of host country's ability/interest in sustaining certain project interventions beyond the project's FY 87 completion date.

2. Evaluation: Decentralized Development Management Project
Project No: 493-0315
Planned Date: 3rd Qtr - FY 86
Est. Eval. Cost - Unknown at this time
Funding Source: Project Funds
Comments: Final evaluation of project. PACD of project is 8/31/86.

3. Evaluation: Micro-Mini Hydroelectric Project
Project No: 493-0324
Planned Date: 3rd Qtr - FY 86
Est. Eval. Cost - Unknown at this time
Funding Source: Project Funds
Comments: Evaluation will be used to partially guide the last year of the project (PACD: FY 87), but mainly to assess possible implications of rural electrification on rural industrialization, an area of major Mission interest.

4. Evaluation: Small Project Assistance
Project No: 498-0279
Planned Date: 3rd Qtr - FY 86
Est. Eval. Cost - None (In House)
Funding Source: N/A
Comments: This will be an in-house joint review by Peace Corps/Thailand and USAID/Thailand to assess project impact. The project is administered by the Peace Corps and funded by USAID.

5. Evaluation: Rural Development Monitoring/Evaluation
Project No: 493-0339
Planned Date: 3rd Qtr - FY 86
Est. Eval. Cost - \$50,000
Funding Source: Project Funds
Comments: This is a mid-term evaluation of progress toward attainment of the objectives of the project. Both expatriate and local expertise will be used in conducting the evaluation.

6. Evaluation: Population Planning II
Project No: 493-0325
Planned Date: 4th Qtr - FY 86
Est. Eval. Cost - \$22,000
Funding Source: Project Funds
Comments: The primary purpose of the evaluation will be to determine the need, (if any) and the focus of a follow-on bilateral population project to begin at the expiration of the Population II Project PACD in 7/87.

7. Evaluation: Renewable Non-Conventional Energy
Project No: 493-0304
Planned Date: 4th Qtr - FY 86
Est. Eval. Cost: \$40,000
Funding Source: PD&S Funds
Comments: To evaluate the social impact of technologies of the project activities on the villagers, social benefit, etc.

FY 87 Evaluations
(Tentative)

1. Evaluation: Lam Nam Oon Irrigation
Project No: 493-0272
2. Evaluation: Seed Development II
Project No: 493-0326
3. Evaluation: Agricultural Technology Transfer
Project No: 493-0337
4. Evaluation: Science & Technology Development
Project No: 493-0340
5. Evaluation: Emerging Problems of Development II
Project No. 493-0341
6. Evaluation: PVO Co-Financing II
Project No: 493-0342
7. Evaluation: Provincial Waterworks Authority Institutional
Development
Project No. 493-0331

FY 88 Evaluations
(Tentative)

1. Evaluation: Rural Industries/Employment
Project No: 493-0343