

130 24164

THAILAND

URBAN ENVIRONMENTAL INFRASTRUCTURE SUPPORT PROJECT

PROJECT PAPER

493-HG-005

RSM/RHUDO/AEP

September, 1993

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT DATA SHEET	1. TRANSACTION CODE <input type="checkbox"/> A = Add <input type="checkbox"/> C = Change <input type="checkbox"/> D = Delete <input checked="" type="checkbox"/> A	Amendment Number _____	DOCUMENT CODE 3
--	---	------------------------	---------------------------

2. COUNTRY/ENTITY Thailand	3. PROJECT NUMBER 493-HG-005
--------------------------------------	--

4. BUREAU/OFFICE Asia	5. PROJECT TITLE (maximum 40 characters) Urban Environ. Infrastr. Support Project
---------------------------------	---

6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 09 30 98	7. ESTIMATED DATE OF ORIGATION (Under "D." below, enter 1, 2, 3, or 4) A. Initial FY <input type="checkbox"/> 93 <input checked="" type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96 B. Quarter <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 C. Final FY <input type="checkbox"/> 93 <input checked="" type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96
---	---

8. COSTS (\$000 OR EQUIVALENT \$1 =)						
A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
* AID Appropriated Total						
(Grant)	(705)	()	()	(4,700)	()	(4,700)
(Loan)	(15,000)	()	()	(100,000)	()	(100,000)
Other J.S.						
1.						
2. Partnership Project	200			2,255		2,255
Host Country						
Other Donor(s)						
TOTALS	15,905			106,955		106,955

9. SCHEDULE OF AID FUNDING (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
1)									
2)									
3)									
4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)	11. SECONDARY PURPOSE CODES
--	------------------------------------

2. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each) A. Code _____ B. Amount _____	
--	--

3. PROJECT PURPOSE (maximum 480 characters) <div style="border: 1px solid black; padding: 10px; min-height: 80px;"> <p>To assist Thailand to develop a sustainable system for financing urban environmental infrastructure which benefit urban households, including low-income families.</p> </div>	
--	--

4. SCHEDULED EVALUATIONS Interim MM YY MM YY Final MM YY 08 95 11 97	15. SOURCE/ORIGIN OF GOODS AND SERVICES <input checked="" type="checkbox"/> 000 <input type="checkbox"/> 941 <input checked="" type="checkbox"/> Local <input type="checkbox"/> Other (Specify) _____
---	---

5. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment)
--

17. APPROVED BY Signature:  Title: Thomas H. Reese, III Mission Director	18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION Date Signed: _____
--	--

URBAN ENVIRONMENTAL INFRASTRUCTURE SUPPORT PROJECT
(Thailand 493-HG-005)

TABLE OF CONTENTS

	<u>Page</u>
PROJECT DATA SHEET	i
TABLE OF CONTENTS	ii
LIST OF ACRONYMS	vi
EXECUTIVE SUMMARY	1
I. PROJECT BACKGROUND AND RATIONALE	2
A. A.I.D.'s Program in Thailand	2
B. Nature of Identified Development Problems	4
1. The need for physical infrastructure is massive and urgent	4
2. Insufficient investment resources are being channeled into environmental infrastructure	5
3. The demand exists for project financing from municipalities and private operators	6
4. The ability of municipalities to handle debt and contract for BOT projects must be demonstrated and improved	6
II. PROJECT DESCRIPTION	7
A. Goal and Purpose	7
B. Project Concept	7
1. Establishment of a Guaranty Facility to stimulate infrastructure investments	7
2. Conformity with country strategy and programs	8
3. Other donors active in infrastructure finance and municipal development	10
C. Project Characteristics	11
1. The Guaranty Facility/The HG Component	11
a. Recommended organizational structure	12
b. Initial operations and management	14
c. Schedule for start up	15
2. Conditions on the Use of HG Resources	17

	<u>Page</u>
3. Opportunities for U.S. Private Sector Participation/The AEP Component	18
4. Technical Assistance/The Partnership Project Component (Mission DA).	20
III. IMPLEMENTATION	22
A. The Borrower of HG Resources	22
B. A.I.D. Project Management	22
C. Evaluations and Audits	23
D. Financial Plan	23
1. Obligation of HG Resources	23
2. Schedule of Inputs	24
E. Procurement Plan	25
IV. SUMMARIES OF TECHNICAL ANALYSES	25
A. The Feasibility of an Infrastructure Guaranty Facility in Thailand	25
B. Illustrative Projects for Loan Financing	27
C. Institutional Analyses	29
1. Ministry of Finance (MOF)	29
2. Industrial Finance Corporation of Thailand (IFCT)	30
3. Ministry of Science Technology and Environment (MOSTE)	30
4. Ministry of Interior (MOI)	32
5. Office of the National Economic and Social Development Board (NESDB).	33
6. The Department of Technical and Economic Cooperation (DTEC)	33
7. Ministry of Industry (MOInd)	33
8. Banks and Other Financial Institutions	34
9. BOT Operators and Municipalities	34
D. Economic Analysis	34
E. Financial Analysis	35

F. Social Soundness Analysis and Women in Development	36
G. Environmental Analysis and Determination	37

ANNEXES

A. PID Approval Cable

B. Logical Framework Matrix

C. Technical Analyses:

- C.1 Feasibility of a Guaranty Facility for Urban Environmental Projects in Thailand
 - A. Requirements for successful Credit Guaranty Programs
 - B. Summary of Experience in Other Countries
 - C. Thailand's Small Industry Credit Credit Guarantee Corporation (SICGC)
 - D. The Feasibility of a new Guaranty Facility for Infrastructure
- C.2 The Credit Capacity of Municipalities
 - A. The Current Situation of Municipalities
 - B. Further Enhancing the Capacity of Municipalities to Borrow
- C.3 Creation of the New Infrastructure Guaranty Facility Description of the Structure and Operations
 - A. Setting up a Corporate Structure
 - B. Operational Guidelines
 - C. Start up - Resources and Schedule
- C.4 Illustrative Projects for Loan Financing
 - A. Types of Projects Eligible for HG Loan Reimbursement
 - B. Environmental Infrastructure Projects identified by City Officials as Potential Projects for Loan Financing.
 - C. The Phuket Water Authority Project Proposal

- C.5 Institutional Roles and Responsibilities
 - A. RTG Policy and Regulatory Agencies
 - B. Financial Institutions
 - C. Local Administration and the Provision of Environmental Infrastructure
- C.6 Economic Analysis
- C.7 Social Soundness Analysis
 - A. Overview of Population and Urbanization Trends
 - B. Economic Growth and Income Distribution
- D. Technical Assistance Plan
 - D.1 The use of DA Funds from US-Thai Development Partnership
 - D.2 Preliminary Policy Objectives and Actions
 - D.3 US-AEP Urban Environmental Infrastructure Program - Grant Proposal
- E. Environmental Determination - Action Memorandum for the Asia Bureau Environmental Officer
- F. Draft HG Authorization and Letter of Advice
- G. Statutory Checklist
- H. Letter of Interest from the RTG

LIST OF ACRONYMS

ADC	Advanced Developing Country
A.I.D.	U.S. Agency for International Development
AID/W	AID Washington
BMA	Bangkok Metropolitan Administration
DA	Development Assistance Grant
DTEC	Department of Technical and Economic Cooperation
EA	Environmental Assessment
GDP	Gross Domestic Product
IEE	Initial Environmental Examination
IFCT	Industrial Finance Corporation of Thailand
IQC	Indefinite Quantity Contract
MOF	Ministry of Finance
MOI	Ministry of Interior
MOSTE	Ministry of Science, Technology and Environment
NESDB	Office of National Economic and Social Development Board
PACD	Project Assistance Completion Date
PID	Project Identification Document
PRE/H	Office of Housing and Urban Programs
PSC	Personal Services Contractor
RHUDO	Regional Housing and Urban Development Office
RSM/EA	Regional Support Mission/East Asia
RTG	Royal Thai Government
SICGF	Small Industry Credit Guaranty Fund
SICGC	Small Industry Credit Guarantee Corporation
TA	Technical Assistance
TR	Technical Representative
U.S.G.	United States Government

- 1 -

URBAN ENVIRONMENTAL INFRASTRUCTURE SUPPORT PROJECT
(THAILAND 493-HG-005)

EXECUTIVE SUMMARY

Estimates for the total level of investment needed for environmental infrastructure in Thailand's cities are staggering. For wastewater treatment alone, Thailand could invest 870,000 million (US\$2.8 billion) immediately and still be far from covering the total need in the country. Only a fraction of the resources needed for investment is currently budgeted by the Royal Thai Government (RTG), or available from international lenders and donors. Private capital markets will need to be tapped if significant progress is to be made on levels of investment within the next few years. If the RTG is to tap private sector capital, it must address the question of risk, real or perceived, involved in lending by the private sector to municipalities and for non-traditional BOT projects.

This Project approves the use of \$100 million in HG resources, and \$2.255 million in Development Assistance (DA) grants (\$1 million from AEP and \$1.255 million from Mission sources). The Housing Guaranty (HG) Project will support efforts to establish a sustainable system for financing investments in urban environmental infrastructure by supporting a new public-private Guaranty Facility for financing urban environmental infrastructure. The HG Project will provide up to \$100 million in HG loans on a matching basis when the RTG makes equity and working capital available for the new Facility; additional equity will be provided by commercial banks and other financial institutions. The Facility will provide guaranties to private BOO/BOT operators and municipalities which they will use to secure loans from commercial lenders for urban environmental infrastructure projects.

The Guaranty Facility will be developed as a public-private corporation, with private sector management. Lending is expected to be five to eight times the level of guaranty funds. In two years, the Facility will have \$50-\$75 million in guaranty funds; over the Life of Project, guaranty funds could grow to \$150 million and leverage up to \$1,200.0 million in loans for environmental projects. Initially, Bangkok, 2-3 secondary cities and 2-3 BOO/BOT operators are expected to borrow for urban environmental projects. Over the Life of Project, ten regional cities, the five cities in the Bangkok Metropolitan Region, and Bangkok itself could benefit from loan financing for investments in wastewater treatment, solid waste collection and disposal, and potable water supply.

About \$1 million will be made available from the US Asia Environmental Partnership (AEP) to identify viable projects for loan funding and to increase access to U.S. suppliers of appropriate environmental goods and services. Mission grant resources (estimated at \$1.255 million) will provide management support and technical assistance for establishing and expanding the Guaranty Facility, improving the credit worthiness of borrowers, improving environmental assessments, and other similar activities.

I. PROJECT BACKGROUND AND RATIONALE

A. A.I.D.'s Program in Thailand

Since 1951, the United States has provided \$1.0 billion of economic assistance to Thailand. From 1951-1973, assistance focused on the building of electrical power plants, irrigation systems, dams, airports, highways, bridges, schools and hospitals. From 1974-89, priorities included agricultural research, credit, small scale irrigation systems and seed development. USAID assistance contributed to successful health care system development, reduction of malaria and family planning. Over 11,000 Thais received academic and non-academic training in the U.S. over this 40 year period.

From 1987-1991, Thailand grew at an average annual GDP growth rate of ten percent, fueling optimism that it will emerge shortly as the fifth Asian Tiger. This extraordinary growth derived from a surge in direct foreign investment; a dramatic rise in manufactured exports; and a boom in tourism. Thailand's solid economic performance is expected to continue in the 1990s but at a more measured pace, most likely six to eight percent per annum.

New United States emphasis on cooperation with Asia-Pacific countries and Thai emergence as a strong new player in the world economy precipitated a reassessment of A.I.D.'s role in Thailand. Recognizing that a premature withdrawal of AID from Thailand would serve neither U.S. nor Thai interests, A.I.D. sought an operational model for Advanced Developing Countries (ADCs) to serve as a bridge between its traditional development program and the eventual termination of A.I.D. assistance. The model adopted recognizes Thailand's growing maturity, and explicitly replaces the donor-client relationship of the last 40 years with a partnership, with both parties committed to sustaining Thailand's economic and social development.

The challenge is to create a long-term, self-sustaining developmental bridge between the U.S. and Thailand. The U.S.-Thai Development Partnership Project (493-0350) funds catalytic interventions. The Project makes available U.S. expertise and technology and resources from various sources for the solution of key Thai development problems and to create sustainable private, public and professional collaborations. The new approach is less staff intensive and aims to augment USAID's modest development budget by bringing other U.S. and Thai financial resources to bear on partnership activities.

The Partnership Project will make available \$20 million over four years. One of its two purposes is to help Thailand identify and implement sustainable solutions to environmental management and

infrastructure problems which, if not addressed, will constrain economic growth and adversely affect equity.

In 1991, The Asian Environmental Partnership (AEP) was announced to support cooperation between the U.S. and Asian countries on environmental problems. One of the AEP's many initiatives is to help Asian countries meet their needs for water supply, wastewater treatment and solid waste systems. An agreement was reached within A.I.D. to combine capital resources, from A.I.D.'s Housing Guaranty Program, and grant resources, from the AEP, to involve U.S. companies in urban infrastructure projects in several Asian countries. Thailand is one of the countries where this concept is being tested.

B. Nature of Identified Development Problems

The HG Project addresses a series of interrelated problems.

1. The need for physical infrastructure is massive and urgent

Thailand's double digit economic growth has not been supported by adequate environmental management nor by appropriate levels of investment in basic infrastructure. In all of Thailand there are only five municipal wastewater facilities, and even these do not fully cover the sewage discharge of the municipalities nor operate efficiently. Bangkok, a city of eight million people, has no wastewater treatment system; its canals are open sewers feeding into the Chao Phraya River.

Solid waste disposal in urban and tourism centers is inefficiently managed. Only a small fraction of total solid waste disposal currently meets reasonable environmental standards.

Roughly 80 percent of water pollution and solid waste is related to urban and households sources, and about 50 percent of air pollution is related to personal vehicles, as opposed to industry. Efforts to deal

with pollution must, therefore, address urban household sources, as well as sources from factories and agriculture. The poorest segment of the population is most affected by the health problems related to the lack of urban infrastructure.

Thailand is beginning to address these problems, but the price is very high. Based on RTG estimates for plants in Bangkok and 125 other cities, investment in wastewater treatment alone would be in the range of B70,000 million (\$2.8 billion). Once estimates are included for financing solid waste collection and disposal systems, hazardous waste treatment, and pollution abatement equipment, the total environmental infrastructure investment needs are staggering.

2. Insufficient investment resources are being channeled into environmental infrastructure

No government in the world has successfully raised enough public revenues to cover all of its municipal infrastructure investment needs on a current basis. Yet capital transfers from the national budget are still the RTG's main form of financing infrastructure. While there is no shortage of private investment capital in Thailand, it is not now being channeled into environmental infrastructure because of perceived risk, high rates of return of other investment options, and the aversion of banks to long-term loans (over eight years) that infrastructure investment entails.

Thailand must begin to use private loan financing to a much larger extent in its investment plans, and to raise funds on the capital markets if it hopes to make significant inroads in the area of environmental infrastructure. If it is to tap private sector capital for loans, the RTG must address the question of risk, real or perceived, of lending to municipalities. In general, financial institutions consider municipalities as risky borrowers because of their negligible experience in lending to them.

3. The demand exists for project financing from municipalities and private operators

The evidence of demand for loans from municipalities is incomplete. Previous programs offering small market rate loans (13%) have been fully subscribed. Also, during project design, municipal officials were asked to identify high priority infrastructure projects they would like to include in future capital budgets if loan financing were made available to them. Municipal officials identified wastewater treatment and solid waste projects, among others, and indicated they would be willing to finance these projects with loans, (See Annex 3), even at interest rates close to market. There are no examples of BOT/BOO projects in the environmental sector as yet, but there seems to be little disagreement that guaranteed loans would be in great demand when those projects are designed and ready for construction.

4. The ability of municipalities to handle debt and contract for BOT projects must be demonstrated and improved

There is growing consensus that the central government cannot manage all of the infrastructure projects required by Thailand's cities. However, municipalities still have limited experience with borrowing, and with no experience BOT projects for environmental infrastructure and services. Within the Ministry of Interior (MOI), the Department of Local Administration (DOLA) manages a small (\$8 million) Municipal Development Fund (MDF) on behalf of local authorities which operates much like a credit union for municipalities to pool contributions and then borrow from the pool for small projects. This fund has been fully subscribed, which is one indicator of demand from municipalities for additional financing.

Also, ten secondary cities participated in the Regional Cities Development Project (RCDPI) where approximately ten percent of the total

investment costs were borrowed by the municipalities from Krung Thai Bank at commercial rates (13%).

A review of municipal budgets in five cities (Nakhon Ratchasima, Udorn Thani, Nakhorn Sawan, Phitsanulok and Samut Prakan) was done for this Project Paper. This analysis indicates that the largest secondary cities could carry larger loans than they currently do with little change in current practices. The analysis also identifies several strategies whereby locally generated revenues could be increased significantly.

II. PROJECT DESCRIPTION

A. Goal and Purpose

The goal of the Project is to assist Thailand to address key urban environmental problems which are affecting economic growth and the quality of life of urban residents.

The purpose of the Project is to assist Thailand to develop a sustainable system for financing urban environmental infrastructure, which benefits all urban households, including low income families.

B. Project Concept

1. Establishment of a Guaranty Facility to stimulate infrastructure investments

The Housing Guaranty (HG) Project will support efforts to establish a sustainable system for financing investments in urban environmental infrastructure by supporting a new public-private Guaranty Facility for financing urban environmental infrastructure. The HG Project will provide up to \$100 million in HG loans, on a matching basis,

when the RTG authorizes capital for this Facility; up to \$50 million in additional equity will be provided by commercial banks and other financial institutions over the Life of Project. The Facility will provide guaranties to private BOO/BOT operators and municipalities which they will use to secure loans from commercial lenders for environmental infrastructure projects.

Lending is expected to be five to eight times the level of funds in the Guaranty Facility. In the first two years, the Facility is expected to have \$50-\$75 million in resources for guaranties and leverage up to \$600 million in loans. Over the Life of Project, the guaranty funds could grow to \$150 million and leverage \$1,200.0 million in loans for environmental projects. Initially, six cities and BOO/BOT operators are expected to borrow for urban environmental projects. Eventually, ten regional cities, the five cities in the Bangkok Metropolitan Region, and Bangkok itself will have access to loan financing for investments in wastewater treatment, solid waste collection and disposal, and potable water supply.

2. Conformity with country strategy and programs

The Royal Thai Government (RTG) has identified both urban and rural environmental protection and restoration as major themes in its Seventh National Economic and Social Development Plan (1992-1996). Major environmental objectives are to reduce solid waste and wastewater pollution and to control water quality in the Chao Phraya River, coastal areas, tourist destinations, and any areas which face sewage problems or contamination of untreated water used for consumption. The Plan identifies several guidelines which show agreement in principal with the policy agenda identified for the HG project, specifically:

enforce the 'Polluters Pay' principal for pollution control;

change relevant regulations, rules and laws concerning environmental administration to make them more conducive to environmental infrastructure development;

mobilize investment to lessen and control pollution in its various aspects such as through government subsidies, public/private joint venture programs, or concessions to the private sector; and

set up tripartite organizations with the government, private enterprise, and the community to supervise and control environmental quality.

Thailand is beginning to address many of its serious environmental problems. Unleaded gasoline is being phased in. Recycling and composting programs are being explored. Toxic waste regulation and clean up is beginning. Wastewater treatment plants are being designed and constructed for cities, factories, and industrial parks. The Royal Family is sponsoring a campaign for cleaning up the Chao Phraya River, a pilot project for using constructed wetlands to treat wastewater, reforestation, and other initiatives.

Public awareness has increased dramatically and political will is beginning to change with regard to all of these important environmental concerns. However, issues of cost and sources of funding for many programs is still uncertain. The RTG understands that a new system of financing is needed, and is beginning to explore options. There have been a series of pronouncements in newspapers about new investments being made through loan financing, but, as yet, the new Guaranty Facility will be the first system change in the way environmental infrastructure is financed.

3. Other donors active in infrastructure finance and municipal development

Currently OECF is the largest donor for infrastructure in Thailand, with a current commitment of close to \$900 million mainly for roads and transportation. Of this amount, the Japanese have pledged \$100 million to support the Environmental Fund in the Ministry of Science, Technology and the Environment (MOSTE). The Environmental Fund, when it becomes operational, will fund priority projects for industry and cities. Most of the resources identified for the Fund have been earmarked by MOSTE, both grants and loans will be given. A MOSTE spokesman said that these resources will to be disbursed in CY1993. Given the Environmental Fund's limited resources, it is expected to target highly visible projects, e.g., toxic waste dumps and high profile tourist areas. The Guaranty Facility is seen as complementary to the Environmental Fund.

Technical assistance in municipal development is now being provided by the Germany bilateral agency (GTZ). It is working with seven municipalities on setting environmental priorities and strengthening local capacity for project implementation. The GTZ program helped develop a set of urban environmental guidelines for municipal leaders, covering topics such as water pollution control, drainage, and solid waste management. The next phase is to develop local strategies to address environmental problems, with GTZ assistance. Participating cities include Chiang Mai, Nong Khai, Samut Prakan, Phuket, Trat, Phayao and Pak Phanang. A.I.D. is currently working in three of these cities and GTZ has expressed interest in expanding its program to other cities involved in the HG Project.

Another donor is UN HABITAT, with UNDP funding, through its Urban Management Program (UMP). The UMP regional office in Kuala Lumpur has been working with country committees, including Thailand, setting priorities for the Program's second phase. Infrastructure management is one thrust of that program.

In Phase I of the UMP, activities included a project with Thai municipal authorities, "Involving the Private Sector in the Provision of Urban Services", and the formulation of the Regional Staff Exchange Programme for Urban Management in Asia. In Phase II (1992-1996), the UMP Infrastructure component is promoting affordability and appropriate standards, pricing for cost recovery, targeting of subsidies, and involvement of the private sector. Activities include city and country consultations on policies and practices and the preparation of a publication in 1993 entitled "Strategic Options for Urban Infrastructure Management."

C. Project Characteristics

1. The Guaranty Facility/The HG Component

The RTG and financial institutions will provide capital for a new Guaranty Facility for loans for environmental projects. As an incentive to the RTG, HG dollar loans will be made available on a basis equivalent to the RTG capital contribution. These dollar loans need not be linked directly to the capital in the Guaranty Facility through a complicated currency exchange and loan arrangement. Instead the RTG contribution, in baht, should be made to the new Facility using normal inter-institutional arrangements. On a parallel basis, the HG loans will provide foreign exchange for up to 30 years, with a ten year grace period on principal, at current market rates in the U.S. (about 6% fixed). The RTG is free to use this foreign exchange in any manner it determines appropriate. The development goals of the Project will be met through the successful operation of the Guaranty Facility. For a more detailed discussion of conditions on HG loans, and the links with the operation of the Guaranty Facility, see Section C.2. on Conditions for Use of HG Resources.

a. Recommended organizational structure

A jointly-owned public private corporation is recommended for the new infrastructure Guaranty Facility. The objective of having public-private ownership is to promote private sector oriented management practices, and to involve skilled private sector financial professionals. While the Guaranty Facility can operate initially as a fund, it should eventually become a corporation in order to be able to increase its capital. When the Small Industry Credit Guaranty Fund (SICGF) became the Small Industry Credit Guaranty Corporation (SICGC), its capital doubled. The capital of the Guaranty Facility will be managed professionally. The manager will not have capital invested, nor will it utilize guaranties which it manages for its own lending. Its fees will come from issuing guaranties, as was the case with the Small Industry Credit Guaranty Fund (SICGF).

All persons consulted in both the public and private sectors agreed that private sector management would be preferable to a government-owned guaranty facility. They believed that private management would be more efficient, less subject to political influence and encourage loan repayment by the municipalities. A government facility would be subject to government civil service regulations, including salary scales, which would make attracting experienced, competent managers difficult. The manager of the new facility should be an experienced banker, hired with private sector competitive salary. Only a small staff will be required.

Recommendations for the organization of the new corporation include the following:

Board of Directors: Voting members would be representatives of the financial institution shareholders (banks, financial corporations) and the MOF. Private sector members would comprise the majority. Ex-officio, non-voting members might include a representative from MOSTE, and one from MOI.

Shareholders:¹ Government would hold less than 50% of total equity. Some commercial banks are public, e.g., Government Savings Bank; GSB equity would be counted as public shareholdings, along with the MOF's. Private sector equity could come from both local and foreign banks, finance companies (merchant/investment banking subsidiaries), IFCT, and others such as insurance companies.

Regulator: Oversight and regulation would be the responsibility of the MOF

The Facility can be established by Cabinet resolution. A detailed business plan, including operational procedures for the Guaranty Facility, will be developed over the next three months. This plan will serve as guidelines for interim operations and as the documentation required to support the NESDB and MOF request for Cabinet approval of the Facility. Eventually, as in the case of the SICGC, a separate juristic person will have to be approved by Parliament. The analyses which were done for the Thai Guaranty Facility are described in ANNEXES C.1, C.2 and C.3.

¹ The larger commercial banks and the Government Savings Bank are potentially the largest shareholders. Participation will be sought from at least seven financial institutions, primarily the banks that are likely to lend to BOT operators and municipalities for environmental infrastructure projects.

b. Initial operations and management

Several interim options for placing the guaranty facility in existing financial institutions were considered. Among the options reviewed were using the Small Industry Credit Guarantee Corporation (SIGCG) which provides loan guaranties for small industries, the Industrial Finance Corporation of Thailand (IFCT) which provides project finance to corporations, and the Government Savings Bank (GSB).

None of these institutions is an appropriate vehicle from the standpoint of the type of projects to be financed. The only guaranty organization in Thailand, SICGC; is charged with guarantying credits for small industries. Having the SICGC manage the facility is not recommended based on the lack of relevant expertise in evaluating large infrastructure projects or other project loans to public sector entities, and its small size. Little relationship exists between the activities of SICGC and the new Guaranty Facility for environmental projects. This lack of business synergy in itself is sufficient reason not to involve the SICGC. While not suitable to manage an infrastructure credit guaranty facility, the SICGC shareholding structure provides a useful model for consideration when establishing the new facility. Likewise, the statute establishing the SICGC illustrates what areas should be addressed in establishing a new Facility.

The IFCT probably offers the best possibility for an interim management solution until such time as a corporation is established. IFCT managed the Small Industry Credit Guaranty Fund, prior to its establishment as a statutory corporation, the SICGC. It has also managed a number of other innovative funds, e.g., the Capital Market Development Fund and helped set up a new Credit Rating Agency. IFCT's board supports participation as manager of the new Guaranty Facility, if asked by the MOF to do so. There appears to be no legal impediment for it to manage a guaranty facility on behalf of the RTG or public/private shareholders.

It might also be possible for a single bank to manage the guaranty program prior to approval of the guaranty corporation. This, however, would be a risky option for a private bank since it raises the prospect of conflict of interest between lending and guarantying. Were the bank not to be an active competitor, e.g., the Government Savings Bank (GSB) or the Government Housing Bank (GHB), this conflict situation would not arise. These institutions are not viewed as commercial competitors. The MOF has recommended using the GSB, but the GSB does not feel it has the necessary project evaluation skills. The GSB supports IFCT as the interim manager.

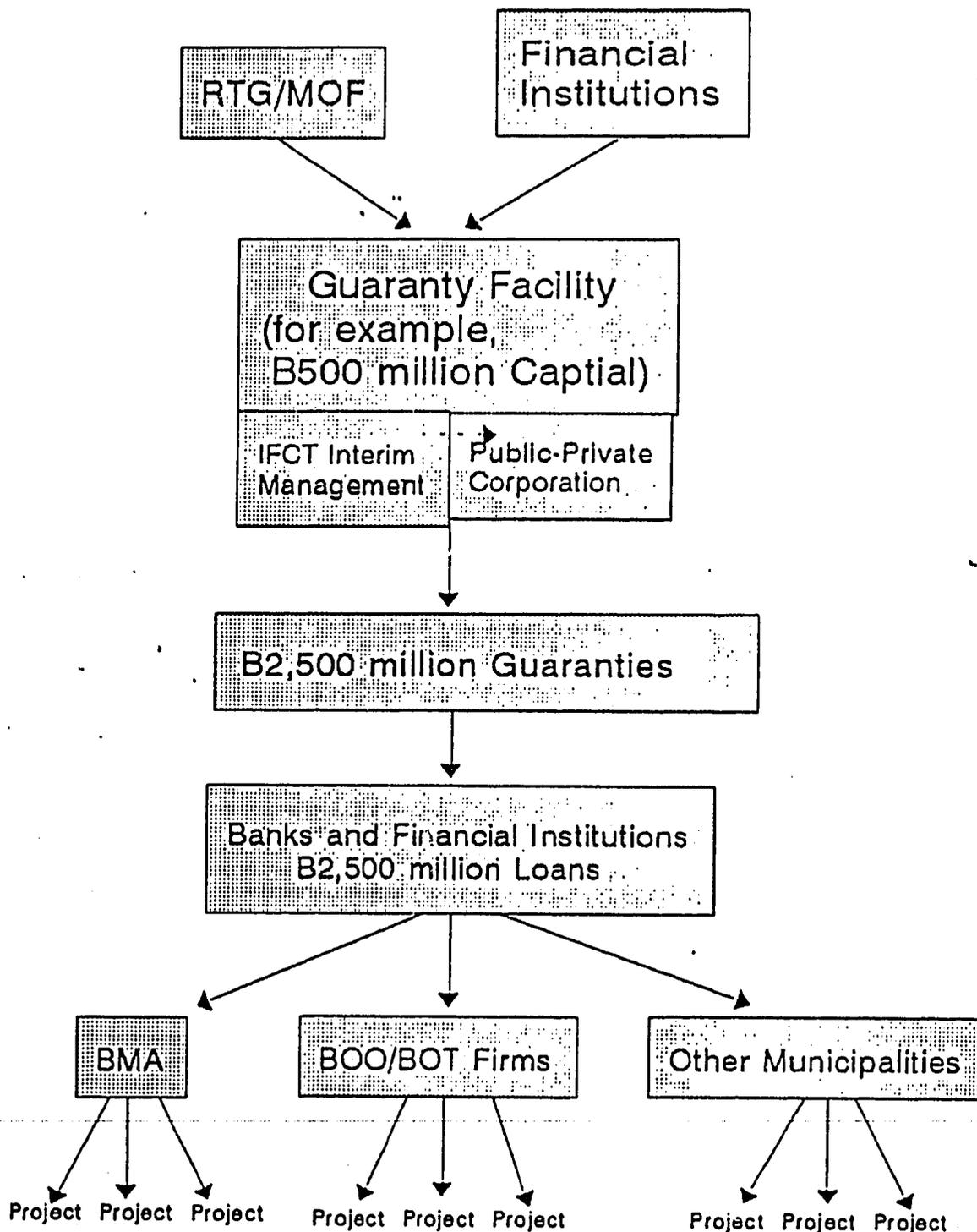
Upon establishment of the Guaranty Facility in 1994, the RTG (through the Ministry of Finance) will domicile an initial sum of approximately B625 million (\$25 million) with the Facility Manager. Another B375 million (\$15 million) would be raised from financial institutions.

The manager of the Facility will invest the equity and other capital in government securities and/or secure investments including short term interest-bearing placements with creditworthy financial institutions in Thailand. The diagram on the next page illustrates the relationships between institutions when the Guaranty Facility begins to operate.

c. Schedule for start up

08/93	MOF agrees in principle to support the establishment of a new Guaranty Facility for environmental infrastructure.
09/93	First tranche of HG authorized.
10/93	Business plan and additional analyses completed, with USAID assistance (PD&S) by RTG working group.
12/93	Proposal presented to Cabinet.
01/94	"Prospectus" provided to potential private sector shareholders
01/94	HG Project Manager hired.

STRUCTURE OF URBAN INFRASTRUCTURE CREDIT GUARANTY FACILITY



- 03/94 Commitments to become shareholders and purchase shares obtained; operations begin under interim management structure, managed by IFCT or another organization for a fee.
- 04/94 Private Sector Technical Representative (AEP) hired.
- 06/94 MOF transfers RTG resources to Facility, earnings from which are used for start-up costs, administrative cost and build-up of guarantee reserves. HG resources are borrowed, if the RTG decides it is appropriate. Simultaneously, proposal submitted to Parliament for incorporation.
- 06/94 Second HG Project manager hired.
- 07/94 First loans are made

2. Conditions on the Use of HG Resources

The HG loans are being made available to the RTG in support of its actions in establishing the new Guaranty Facility. In the first instance, up to \$25 million in HG loans will be authorized, equivalent to the RTG paid in capital for the Guaranty Facility.

A.I.D.'s issuance of a Guaranty for the first HG loan is dependent on the Royal Thai Government's demonstrated support for the establishment of the Guaranty Facility for loans for shelter-related urban environmental infrastructure projects and for securing equity contributions from commercial financial institutions. Prior to the issuance of guaranties for subsequent loans, the borrower shall present eligible expenditures satisfactory to A.I.D. These requirements will be set forth in an implementation agreement to be signed by the United States Government and the Royal Thai Government.

"Eligible expenditures" in the context of HG projects relate to shelter-related services provided to urban residents, particularly low income residents. Some of the loans made for infrastructure projects with guaranties from the new Facility will be used to justify the HG resources through the presentation of "eligible expenditures". Based on

the social soundness analysis (Annex C.7), 75 percent of citywide loans in cities outside of Bangkok should benefit low income families and therefore be "eligible expenditures". Within Bangkok, only 40 percent of city-wide projects would be considered "eligible expenditures".

In most cases outside of Bangkok, proposed systems are city-wide. In Bangkok, however, sub-projects are much more common. The borrowers of guaranteed loans will be asked to certify that projects are city-wide. When they are not, borrowers will be asked to present an estimate of urban households benefitting from the project, by income level. Eligible expenditures as defined for this Project, will be subject to certifications from A.I.D. staff as well.

3. Opportunities for U.S. Private Sector Participation/The AEP Component

AEP grant resources will be used in conjunction with HG investment capital to enhance the access of U.S. companies offering equipment, goods and services for urban environmental infrastructure projects.

In preliminary visits to four municipalities (Nonthaburi, Samut Prakan, Nakhon Ratchasima, and Bangkok), projects were identified for potential loan financing. Cost estimates (extremely rough at this stage) were made for solid waste and waste water projects. The estimated total projected costs for these projects was about US\$98 million; about 10 percent of total costs was for equipment and inputs requiring foreign exchange, e.g., trucks, transformers. Other projects, such as flood control and storm drainage, were identified, but no cost estimates were made. Also a proposal for private water supply in Phuket shows potential for a BOO project. Annex C.3. presents more detailed information on eligible projects and BOT/BOO and municipal projects which could be financed by the Facility.

Bangkok is especially, important as a market for U.S. goods and services. The first phase of BMA's waste water treatment system is already contracted, but will cover only two million of Bangkok's estimated population of six million. The additional phase of waste water treatment and other solid waste, and storm drainage projects in Bangkok represent total costs which are larger than all of the projects in all of the other cities in Thailand combined.

An estimated \$1 million of AEP DA resources will support both long-term and short-term assistance to identify viable municipal projects for loan funding, and U.S. suppliers of appropriate equipment and services. The use of these resources, described in Annex D.3, may be summarized as follows:

A full time Urban Environmental Infrastructure Technical Representative (TR) will be hired and managed by the U.S. Thai Development Partnership Project to work with municipalities on the development of projects. When the Guaranty Facility is established, this contractor would be involved in projects submitted for financing at a very early stage. The TR would also provide on-the-job training to the municipalities on how to conduct pre-feasibility studies. He/she would also look for joint venture opportunities in environmental infrastructure for U.S. and Thai firms, and develop the groundwork for BOO/BOTs. AEP resources will also support BOG/BOT project development and provide enhancement grants for additional training to projects with U.S. private sector participation.

In addition, AEP resources will be used to support a U.S. broker/facilitator at a major U.S. association who will provide access to U.S. equipment suppliers. The contract may be jointly funded with ~~Indonesia or other countries looking for the same kind of services.~~ This facilitator will conduct searches for appropriate U.S. technologies and services, based on the needs identified by the TR. The facilitator will

make periodic trips to Thailand to get a thorough grounding in the projects that are being developed, but will be based in the U.S. The facilitator will provide access to a range of U.S. companies which supply the goods and services meeting project needs of Thai cities.

The AEP resources will support work with ten or more municipalities. If a group of municipalities receiving loans need the same equipment, e.g., transfer stations, trucks and other related solid waste equipment, U.S. companies would have a larger marketing opportunity than they would have working with just one municipality. Also, opportunities for joint ventures would be identified on a regular, systematic basis. If the Guaranty Facility becomes as large as some analysts project, total financing for projects could surpass \$1 billion.

4. Technical Assistance/The Partnership Project Component (Mission DA)

Technical Assistance will focus on cities borrowing for municipal infrastructure. Grant resources from AEP will be used to further the design of projects which are accepted for loan financing, as well as to provide greater access to U.S. goods and technical services. Mission DA will be used to help borrowers, both BOT operators and municipalities, to improve revenue streams to pay back loans.

In addition, several policy areas have been identified for collaboration with the RTG, which further the Project's purpose to develop a sustainable system of finance for infrastructure. For example, promotion of changes in property tax law, tax incentives for private sector participation in municipal services and infrastructure, incentives for public-private partnerships in land development, and other actions would greatly expand the private sector involvement in environmental projects and the access to private finance for such projects.

Funds for short-term technical assistance and twinning will be approved when:

(a) A clear connection is made between the activity and the Project's objectives.

(b) The RTG can show that actions have begun to be taken on the activity, i.e., there has been some progress on the activity.

(c) Counterpart resources, from DTEC, local government, private sector, etc. are identified. If more activities are identified than can be funded with available resources, selection will take into account of the leveraging of additional funds of various activities.

(d) The U.S. has a comparative advantage in terms of technologies or a solution to a problem.

Activities which may be funded include additional twinning arrangements, such as the four which are underway:

Chiang Mai - Knoxville, Ta: This twinning will focus on the management of solid waste, looking at technologies for collection and disposal, and ways to improve fee collection and to develop by products which enhance revenues.

Samut Prakan - Corpus Christie, Tx: Samut Prakan is highly industrial and faces severe industrial pollution, as well as problems related to treatment of household wastewater. This exchange involves planning for a new sewerage treatment system. Participants will look at options for operation and maintenance and the organization of Samut Prakan's wastewater department. It also involves the introduction of the concept of impact fees for both industrial and residential development.

Pattaya - Savannah, Ga: The lack of waste water treatment from hotel and residences has had a negative impact on Pattaya's tourism. This twinning focuses on the management and operation of two new plants, water conservation, public environmental awareness, and financing options for additional wastewater capacity.

Bangkok - Sanitary District of San Francisco: The city of Bangkok is facing significant water shortages as demand increases without consonant increases in supply. This twinning focuses on the reduction of leakages and water conservation, as well as on waste water treatment and reuse.

III. IMPLEMENTATION

A. The Borrower of HG Resources

The Ministry of Finance (MOF) will be the borrower of HG dollar loans.

B. A.I.D. Project Management

The Project will draw upon Mission resources to provide management support as well as short-term technical assistance. An estimated \$1.255 million in Mission resources will be used from the approved U.S.-Thai Development Partnership Project (493-0350). (A description of how the TA workplan will be developed is provided in Annex D.1.)

No additional U.S. Direct Hire staff are required to manage the Project. Two local PSCs will be hired by RHUDO for Project management. Also, one local hire Technical Representative will be hired through the U.S. Thai Partnership contractor to help identify viable projects, using the AEP grant resources.

C. Evaluations and Audits

The mid-term and final evaluations are planned in the 3rd Quarter FY 1995 and the 1st Quarter FY 1998, respectively. Audits will be carried out in accordance with the Partnership Project audit plan.

D. Financial Plan

The only resources which are authorized by this Project Paper are HG loan resources. The grant resources from USAEP (\$1,000,000) and the Mission (approximately \$1,255,000) will be obligated through the Mission's U.S.-Thai Partnership Project (493-350). That Project will earmark resources to be used in support of the HG Project. For the purposes of the Project Paper, an illustrative schedule of inputs of both DA and HG loans is provided in section 2 below.

1. Obligation of HG Resources

HG resources are authorized on an annual basis, depending upon the availability of authority given world-wide demand, and on country-specific progress toward the objectives of the Project. While no more than \$25 million in HG authority can be authorized in any one year in any country, a borrowing can be much larger if a government decides to space out its borrowing, e.g., every other year. The following is an illustrative schedule of authorizations and borrowings for the Thailand HG Project.

Illustrative Schedule for HG Loans
(\$000)

	FY93	FY94	FY95	FY96	FY97
HG authorization	20	20	20	20	20
HG Borrowings		25	25	25	25

2. Schedule of Inputs

DA resources for technical assistance and project management are earmarked from several sources, (Mission and USAEP) but are not being obligated through this Project. The following provides an estimation of all Project inputs.

Illustrative Schedule of Inputs (\$000)

	FY94	FY95	FY96	FY97	TOTAL
HG Borrowings	25.000	25.000	25.000	25.000	100.000
USAEP Grant*	.500	.500			1.000
US/ThaiPartn.Proj.**	.315	.330	.280	.330	1.255
Other Resources***	100.10	200.20	200.30	250.30	750.900

*See ANNEX D.E. for a description of the proposed use of the USAEP resources.

**See ANNEX D.1 for a description of the proposed use of the US-Thai Development Partnership DA funds.

***Two kinds of resources will be leveraged by the Project, principally from the private sector. The principal purpose of the Project is to leverage loan funds which will total an estimated \$750 million, minimum, by the end of the Project. In addition, an estimated \$900,000 will be leveraged in private sector (U.S. and Thai) and RTG resources in connection with the technical assistance activities which are carried out.

E. Procurement Plan

A range of contracting actions are expected in connection with this Project. Although the procurement may occur under the Partnership Project, the activities are listed herein.

Procurement Plan

Category	Type Contract	Schedule	Cost (\$000)	Fund Source
ProjManagem.	1 PSC	1/94	\$160(4yrs)	Partnersh.Proj.
	1 PSC	6/94	\$160(4yrs)	Partnersh.Proj.
Evaluation	IQC	9/95	\$ 50	Partnersh.Proj.
Evaluation	IQC	12/97	\$ 50	Partnersh.Proj.
Tech.Assist.	CoopAgrm/Partner	1994 ongoing	\$235	Partnersh.Proj.
Tech.Assist.	CoopAgrm/Partner	1995 ongoing	\$200	Partnersh.Proj.
Tech.Assist.	CoopAgrm/Partner	1996 ongoing	\$200	Partnersh.Proj.
Tech.Assist.	CoopAgrm/Partner	1997 ongoing	\$200	Partnersh.Proj.
AEP Tech.Rep	CoopAgrm/Partner	4/94	\$200 (2yrs)	AEP Grant
Access U.S.	direct grant	1994	\$100 (2yrs)	AEP Grant
Access U.S.	CoopAgrm/Partner	1994	\$200 (2yrs)	AEP Grant
TA/Train.	CoopAgrm/Partner	1994-95	\$500 (2yrs)	AEP Grant

IV. SUMMARIES OF TECHNICAL ANALYSES

A. The Feasibility of a Guaranty Facility for Urban Environmental Projects in Thailand

Annex C.1. describes requirements for successful guaranty programs, reviews experiences with guaranty facilities in other countries and with Thailand's Small Industry Credit Guarantee Corporation, SICGC, and analyses the feasibility of the new environmental infrastructure Guaranty Facility.

The proposed facility appears feasible, legally, technically and financially.

- o It will have substantial paid-in capital from the MOF and participating banks.
- o It will be set up as a corporation, with a majority of board members from participating financial institutions. Therefore, it should have organizational autonomy.
- o The proposal clearly has support from Government. The MOF is taking the lead in establishing the Facility. The impetus behind the RTG is its intention to reduce grants, and decrease the central government's funding of municipal public works (currently about 75%).
- o Risk is shared with the private sector since commercial banks will have equity in the facility.
- o Appropriate security in place of collateral is likely to come from special deposits of municipal resources in a sinking fund which would be used as first line guaranties against default, and BOT projects will offer other forms of collateral.

- o With a guaranty, banks can use their "prime" rate, 11-12 percent, and have an adequate spread.
- o An appropriate fee structure can be established, based on the needs of the banks, and the experience gained in other guaranty facilities. One of the problems encountered in Thailand's SICGC was that the fee structure did not cover administrative costs for very small loans. Environmental projects will require much larger loans.
- o In general, there are no legal impediments to the creation of a new Facility. A Cabinet resolution is required initially. Operations can begin immediately. Parliamentary approval will be sought later, as was the case for the SICGF.

There are some concerns related to the perceived capacity of municipalities to borrow. This subject is analyzed in ANNEX C.2.

B. Illustrative Projects for Loan Financing

The Guaranty Facility for environmental infrastructure is being designed to finance private and public sector projects. While all projects will be built by the private sector, a few also may be owned and operated by the private sector, or as public-private partnerships. Solid waste management projects lend themselves to private sector initiatives, since fees and revenue streams can be more directly managed by the private sector. In a 8/19/93 article in the Bangkok Post, the Chairman of a large Thai finance company identified waste management as one of two sectors in which the company planned to invest in the immediate future.

Bulk water supply also provides potential investment opportunities for the private sector. (Distribution networks within cities are less appealing to the private sector given tariff collection considerations.)

A recent proposal for Phuket has received wide attention. This proposal is to develop a private Phuket Water Authority that would seek to develop a reservoir in nearby Phangnga Province, then pipe and distribute the water throughout Phuket.

In addition to private sector initiatives, municipalities have many projects which are on hold due to lack of financing for the central government. For example, Nonthaburi would like to develop a new sanitary landfill site to replace the existing distant one (35 km. away) which has little remaining capacity. A new landfill site is estimated by city officials to cost about 152 million Baht. The city also needs more and improved refuse collection vehicles. The total capital requirements for the next three years for the sanitation department amounts to some 166.2 million Baht, or \$6.64 million, split equally between local and foreign costs.

Similar projects have been identified in Samut Prakan, Nakhon Ratchasima and various other secondary cities. The BMA has embarked on an extensive waste water treatment project. The contract has been let contract of three of the four project for the First Phase but the largest part of the Project is still in the design stage.

The types of projects eligible for loan financing have not been finalized, but the list is expected to include:

- Solid Waste Projects, e.g., collection vehicles of various types, recycling equipment.
- Resource recovery systems: sorting, separation and/or spreading, composting, methane gas production, high temperature reduction and energy production.

- Refuse disposal: land fill construction, drainage control and equipment (trucks, tractors, cranes, barges), waste storage, clean up and closing of land fills.
- Potable Water Projects, e.g., wells, aquaducts.
- Storm Drainage Projects, e.g., street drains, tunnels, lined canals, grates, settling basins, dikes, wetlands construction, and klong dredging and cleaning.
- Waste Water Projects (Gray Water), e.g. installation, expansion, rehabilitation and upgrading of waste water collection networks and sewers.

See Annex C.4 for a more detailed list.

C. Institutional Analyses

1. Ministry of Finance (MOF)

The MOF is ultimately responsible for all decisions related to RTG foreign currency borrowing and domestic fiscal policy. Its Fiscal Policy office has two divisions which will be involved in the Project, a) Loan Policy and Management Division which will monitor HG borrowing, and b) Monetary Policy and Financial Institution Division which will oversee establishment of the Guaranty Facility. The MOF is also the sole government entity that can hold shares directly on behalf of government. The MOF has the authority to commit the government to financial guaranties under the Act Determining the Power of the Ministry of Finance. The MOF's involvement in the creation of a similar guaranty facility (SICGC) is described in Annex C.1.

2. The Industrial Finance Corporation of Thailand (IFCT)

The Industrial Finance Corporation of Thailand (IFCT) is likely to be the interim manager of the new Guaranty Facility. It is a development finance institution established in 1959 under the Industrial Finance Corporation of Thailand Act. Its main objectives are to promote the development of private industrial enterprises and the domestic capital market. It is managed as a private organization, and its financial services for projects are consistent with the Government's development policies. Its services include: medium and long term loans, working capital loans, equity investments, loan syndications, guarantees, and investment advisory services. IFCT also manages special funds set up by the Government, such as the Industrial Development Fund, the Capital Market Development Fund, and the Small Industry Credit Guaranty Fund. IFCT's shareholding structure is approximately as follows: commercial banks, foreign and Thai (30%); private companies, finance, security, and insurance (29%); Ministry of Finance (17%), Krung Thai Bank (8%) and the remainder with private individuals. Its affiliated companies include: The Mutual Fund Co., Ltd., The Thai Factory Development Co., Ltd., The Industrial Management Co. Ltd., The Thai Orient Leasing Co., Ltd., and the Bara Development Finance and Securities Co., Ltd.

3. Ministry of Science, Technology, and Environment (MOSTE)

MOSTE is responsible for formulating RTG environmental protection policies and funding selected environmental infrastructure projects. It has been playing a leading role in ensuring that other RTG agencies adopt and follow appropriate environmental standards. The Environmental Act of 1992 provides MOSTE with widespread authority in a number of environmental areas.

MOSTE issues specific regulations for Environmental Impact Assessments (EIAs). EIAs are required for hotel or resort facilities in environmentally sensitive areas with more than 80 rooms, for industrial estates of all sizes, for thermal power plants, and several types of industrial installations. Environmental Analyses (more streamlined than EIAs) will be conducted for all environmental projects financed through the Guaranty Facility. Only in cases where indicated will EIAs be required.

The MOSTE Environmental Fund was launched in March 1992, although no projects have been funded, as yet. Initial capital includes \$20 million from the RTG budget and \$200 million from the Oil Fund. Fifty percent of the Fund is earmarked for industrial pollution control and 50 percent for municipal waste management. The Fund will be used in support of the RTG's budget in solving politically sensitive environmental problems such as wastewater, solid waste, air pollution, and natural resource management.

The Environmental Fund will disburse some resources in the form of grants, and some as loans. The terms of loans have not been established. The range of five to six percent has been mentioned, as well as four percent per quarter (which would be a market rate). The manager of the Fund has not yet been announced. When the conditions of the resources are determined, and the Fund is operational, it is likely that the funds will be distributed quickly. Most of the funds have already been earmarked for projects according to various government spokesmen. OECF has indicated support for additional projects in the future, with funding levels up to \$100 million a year.

The MOSTE Director of the Fund sees its operation as complimentary to the Guaranty Facility. Given the Fund's resource limitations and the high political profile of its project, e.g., hazardous waste dumps, important tourist locations, its disbursements

probably will be made on soft terms. This is not, however, seen as competition with the Guaranty Facility given the vast needs for investment in Thai cities and industry. If cities receiving Environmental Fund resources are credit worthy, they would be able to borrow with guaranties, to carry out a greater number of projects.

The information gathered for the development of the Guaranty Facility will be shared with MOSTE and with other RTG institutions involved in municipal finance. As these various financing mechanisms become operational, coordination will be continued.

4. Ministry of Interior (MOI)

The MOI is critical to the project insofar as loans are made to municipalities. Few municipalities have the resources or, training to "go it alone" though, they have more authority and capability than they use. Within the MOI, several offices may be involved:

- o Office of Policy and Planning (OPP): This office is responsible for preparation of policies and plans on activities under the responsibility of the Ministry and coordinates with other agencies at the national level.
- o Public Works Department (PWD): This is generally the lead technical agency for the MoInt in the development of water supply, sanitation, and other engineering works outside of Bangkok. PWD is especially important in the development of wastewater treatment capabilities for municipalities and other local governments.

- o Department of Local Administration (DOLA): DOLA is responsible for all activities at the provincial and local levels.

5. Office of the National Economic and Social Development Board (NESDB)

This is the national agency which serves as an advisory body to the Prime Minister. Its responsibilities include the development of policies and preparation of the five-year development plan at the national level.

NESDB has been helpful in coordinating other RTG line agencies in the preparation of the HG Project. If Cabinet approval is required for the creation of the Guaranty Facility, the NESDB will advocate its approval. The Cabinet would request NESDB's analysis and recommendation of the HG Project.

6. The Department of Technical and Economic Cooperation (DTEC)

DTEC coordinates all foreign grant assistance to Thailand. Proposals for both RTG and foreign donor agency initiated projects are channelled through DTEC for review and approval. DTEC will need to be consulted frequently during project implementation so that the effectiveness of USAID grant assistance, and possibly other donor funding, can be maximized to the greatest extent possible.

7. Ministry of Industry (MOInd)

This Ministry could be involved in BOO/BOT Projects financed by a Guaranty Facility,

8. Banks and Other Financial Institutions

Sixteen Thai commercial banks operate in Thailand, as well as the Government Savings Bank which undertakes many commercial banking activities. The largest commercial bank is Bangkok Bank, Ltd.

The commercial banks do not generally lend to municipalities, except for the Bangkok Metropolitan Administration (BMA), for large, high profile projects which involve participation of consortia of prominent companies. The banks would be most interested in BOT projects, and would look most favorably upon projects for Bangkok because of project size.

The Krung Thai Bank has the most experience lending to municipalities. Initially, it is expected to be the most involved in this lending.

9. BOT Operators and Municipalities

BOT Operators and Municipalities will be the borrowers under the Project. See ANNEXES C.5. and C.2. for discussions of municipal functions and debt capacity.

D. Economic Analysis

ANNEX C.6 has an overview of Thailand's economy. Regarding the use of HG loans, given Thailand's ADC classification, the use of such resources for development is extremely appropriate. HG dollar loans, made by the U.S. private sector, carry a U.S. and a Host Country Guaranty, and usually are for 30 years with a ten year grace period on interest. While the loans are at market rates, rates in the U.S. are relatively low at this time. HG loans provide untied foreign exchange. These dollars can be used by the government to restructure commercial debt, or for any other activity requiring foreign exchange. If urban

infrastructure projects require foreign exchange, this can be made available directly from the HG loan as deemed appropriate by the RTG. Also, Thailand's creditworthiness, as determined by the Department of Treasury, makes it an eminently suitable borrower of USG guaranteed loans.

The HG project is also economically sound in that it is supporting RTG efforts in developing sustainable financing for infrastructure. The projects will be financed with commercial bank loans. Also, cost/benefit analyses of environmental infrastructure projects should take into account the environmental cost to society that results from the lack of basic infrastructure. While this cannot be quantified in exact terms for Thailand, it is clear that Thailand as a nation is paying dearly for its lack of basic infrastructure, both in terms of poor quality of life for urban residents and in economic disincentives.

The grant funded activities will follow the strategic partnership model which require considerable leveraging of resources from partners and is aimed at identifying sustainable solutions to development problems. (See Partnership PP.)

E. Financial Analysis

BOO/BOT projects must have adequate revenue streams in order for a private developer to be interested in investing. In many cases, these revenue streams are from municipal budgets.

Annex C.2 provides an analysis of the income and expenditure patterns of municipalities. It looks at their existing unused capacity, and at possible medium term courses of actions which could significantly change the revenues and borrowing capacity of cities in Thailand. Five

sample cases were examined. If these municipalities were to increase the average percent of income dedicated to debt service from six to ten percent (still less than the 15 percent average internationally), and also dedicate annual surpluses to debt service, borrowings could rise by \$46 million immediately. The application of better property tax assessment procedures could almost double that source of revenue. Over the medium term, other techniques or strategies could fundamentally change the revenue of cities and their autonomy with regard to borrowing and capital expenditures.

F. Social Soundness Analysis and Women in Development

ANNEX C.7. provides information on urbanization, and income levels in Thailand. Based on NESDB data, the national urban median for 1993 is B14,305 per month. The data shows that the median income of households in all cities outside the Bangkok Metropolitan Region is lower than the national urban median. About 75 percent of the entire urban population outside BMR falls below the national urban median. Therefore, for the purposes of the HG Project, 75 percent of any city-wide urban environmental project outside Bangkok, should be "eligible expenditures" for HG disbursements. In the case of Bangkok, the 40th percentile (Bht. 13,749 in 1993) is close to the national urban median. Therefore, 40 percent of city-wide projects in Bangkok should be an "eligible" expenditure for the purposes of HG disbursements.

The situation of woman in Thailand is relatively good as demonstrated by comparative gender gross enrollment rates at all levels of education. Official data is not sex disaggregated, but numerous private studies have shown roughly equal enrollment rates, high female labor force participation and relatively low gender-related wage differentials. Supporting data for this approach were provided to AID/W in the Thailand WID Action Agenda of 1989.

Children are expected to benefit most from improved health as a result of better infrastructure and sanitation. Women, as primary health care givers for children, will also benefit in terms of reduced time and cost spent on illnesses. No adverse effects are expected from the Project on women or children.

G. Environmental Analysis and Determination

A categorical exclusion was requested for this Project. The Project is entitled to a categorical exclusion from the procedural requirements under section 216.2(e)(2) because it provides for two basic categories of assistance:

(1) Training and technical assistance (not including construction of facilities) and

(2) Financial support for an intermediate credit institution.

Financial assistance is provided through support for an intermediate credit institution, the Guaranty Facility. This facility will promote bank lending for urban environmental infrastructure by providing repayment guarantees for approved projects. Implementation, including assessment, review, and approval of projects, will be performed by Thai, consultants, credit institutions and government agencies subject to the criteria established for this program. While AID has established basic criteria and program direction, it will not have knowledge of individual projects prior to funding nor will it have control over individual projects selected. This support for an intermediate credit institution is also specifically identified as qualifying for a categorical exclusion under section 216.2(c)(2)(x).

Despite these categorical exclusions from procedural requirements, both USAID and the RTG are committed to inclusion of environmental criteria for infrastructure activities under the Project. All projects proposed for funding with guaranties will first be subjected to environmental analysis by an independent environmental consultant registered for that purpose with the Ministry of Science, Technology and Environment. In addition to the environmental analysis performed on behalf of the project proponents, project supporters will also have to assure that their analysis has been reviewed by the Ministry of Science Technology and Environment or another competent independent environmental review body. See ANNEX E. for a more detailed discussion of the institution responsibilities for environmental reviews and suggested technical assistance.

ACTION AID2 INFO DCM EXA ECON (5)

VZCZCTH0073B0540

PP RUEHBK

DE RUEHC #9017/01 2010413

ZNR UUUUU 22H

F 220413Z JUL 93

FM SECSTATE WASHDC

TO AMEMBASSY BANGKOK PRIORITY 9823

BT

UNCLAS SECTION 01 OF 02 STATE 219017

AIDAC BANGKOK FOR MHUDD

E.O. 12356: N/A

TAGS:

SUBJECT: THAILAND HOUSING GUARANTY PROGRAM FOR URBAN ENVIRONMENTAL INFRASTRUCTURE (493-HG-005)

20-JUL-93 TOR: 04:23
CHRG: AID
DIST: AID

1. WE APPROVE THE THAILAND HOUSING GUARANTY PROGRAM FOR ENVIRONMENTAL INFRASTRUCTURE (493-HG-005) PROJECT IDENTIFICATION DOCUMENT (PID), DELEGATION OF AUTHORIZATION AUTHORITY FOR MISSION DIRECTOR IN PARA. 2. DESIGN GUIDANCE IS PROVIDED IN PARA. 6. END SUMMARY.

2. PURSUANT TO DELEGATION OF AUTHORITY NO. 430, DATED AUGUST 16, 1991, AND INTERIM REORGANIZATION DOA NO. 9, PARA. A, DATED OCTOBER 1, 1991, A-AA/ASIA HEREBY DELEGATES TO THE DIRECTOR, USAID/THAILAND, PROGRAM AUTHORIZATION AUTHORITY FOR THE THAILAND HOUSING GUARANTY PROGRAM FOR ENVIRONMENTAL INFRASTRUCTURE (493-HG-005). TOTAL GUARANTY AUTHORITY FOR THIS PROGRAM IS LIMITED TO DOLS 100 MILLION, WITH AN ANNUAL AUTHORIZATION LIMIT OF DOLS 25 MILLION.

3. CURRENT LEGISLATION ON CREDIT REFORM REQUIRES THAT THE SUBSIDY BE AUTHORIZED SIMULTANEOUSLY. SPECIFICALLY, THE MISSION AUTHORIZATION LANGUAGE MUST CONTAIN THE QUOTE SUBSIDY COST UNQUOTE OF THE GUARANTY AS CALCULATED BY AID/FA/B AND THESE ANNUAL AUTHORIZATIONS MUST BE CLEARED

BY AID/FA/FM/LM PRIOR TO EACH AUTHORIZATION.

4. DESCRIBE THE POLICY AGENDA IN PP AND REPORT PROGRESS MADE TOWARD POLICY AGENDA TARGETS IN THE SEMI-ANNUAL PROJECT IMPLEMENTATION REPORTS (SAPIRSY).

5A. BUREAU REVIEW: THE PID REVIEW WAS HELD ON THURSDAY, JUNE 24, 1993. THE MEETING WAS CHAIRED BY ASIA/DR AND WAS ATTENDED BY ASIA/EA, ASIA/DR (TR AND TD), CC/ASIA, ASIA/FPM, US-AEP, PRE/H, POL/PAB, AND THE REGIONAL HOUSING AND URBAN DEVELOPMENT OFFICE DEPUTY CHIEF WHO MADE THE PRESENTATION AND REPRESENTED THE MISSION. IN HER OPENING REMARKS THE MISSION REP DESCRIBED THE EXISTING LIMITS ON THAILAND'S ECONOMIC GROWTH DUE TO INFRASTRUCTURE CONSTRAINTS AND THE ECONOMIC RATIONALE FOR USING HOUSING GUARANTY (HG) RESOURCES. THE CONCLUSION OF THE PID REVIEW COMMITTEE WAS TO RECOMMEND THAT THE A-AA/ASIA DELEGATE

RECEIVED		
JUL 21 1993		
ACT		INFO
	D	
	DD	
	PLA	
	EXO	
	FIN	
	PSP	
	TR	
	PDE	
	RP	
✓	EMUDD	
	ASEAN	
	DTEC	
	GMH	✓
DUE DATE _____		
ACTION TAKEN _____		
INITIAL _____		
DATE _____		

PROGRAM AUTHORIZATION AUTHORITY TO THE THAILAND MISSION DIRECTOR.

5B. TOPICS DISCUSSED: THE DISCUSSION FOCUSED PRIMARILY ON THAILAND'S BORROWING CAPACITY AND THE RATIONALE FOR A HG PROGRAM IN THAILAND; CONDITIONALITY, POLICY DIALOGUE, AND ITEMS FOR THE POLICY AGENDA; AND THE ADEQUACY OF THE TECHNICAL ASSISTANCE LEVELS. BASED ON THE AMOUNT OF THE HG AND THE PROJECT COMPLEXITIES, THE COMMITTEE WONDERED IF MORE TA WOULD BE NEEDED TO FOSTER THE COOPERATION OF THE VARIOUS THAI ENTITIES TO BRING ABOUT THE DESIRED CHANGES AND ATTAIN THE IMPACT ENVISIONED.

5C. OTHER TOPICS INCLUDED THE ROLE OF US-AEP AND THE THAI PARTNERSHIP PROJECT, GENDER ISSUES, AND HOW THE SECTOR-BASED PROGRAM WILL WORK. COPIES OF ALL ISSUE PAPERS WERE PROVIDED TO THE MISSION'S REPRESENTATIVE FOR USE IN THE DESIGN PROCESS.

6. PP PREPARATION GUIDANCE:

(A) THE PID DID NOT DISCUSS ANY CONDITIONALITY ON THE RELEASE OF FUNDS. RULES, PROCEDURES, ETC. FOR ESTABLISHING AND OPERATING THE GUARANTY FACILITY WERE DISCUSSED, AND IT WAS AFFIRMED THERE WAS NO CONDITIONALITY ON DISBURSEMENT OF FUNDS EXCEPT THAT DISBURSMENTS WOULD OCCUR ONLY AFTER THAI PUBLIC AND PRIVATE SECTOR MATCHING OF EQUITY IN THE GUARANTY FACILITY. HOWEVER, NO FORMULA NOR STRICT GUIDELINES HAD BEEN ESTABLISHED FOR THESE CONTRIBUTIONS. PP SHOULD DESCRIBE THE GUIDELINES FOR EQUITY PARTICIPATION.

(B) THE IDEA OF MUNICIPAL TWINNING NEEDS TO BE EXPANDED

TO ENSURE CLARITY AND PROVIDE THE SPECIFICS ABOUT HOW THINKING WOULD BE USED TO SUPPORT THE PROJECT, AND THE LIST OF ACTIVITIES TO BE ASSISTED BY TA NEEDED TO BE PARED DOWN IN ORDER TO BE MORE REFLECTIVE OF EXPECTATIONS AND RESOURCES.

(C) FOR GENDER SENSITIVITY: LANGUAGE IN THE SCOPE OF WORK FOR BOTH THE DESIGN PROCESS AND PROGRAM IMPLEMENTATION SHOULD EMPHASIZE TO THE CONTRACTOR(S) THE IMPORTANCE OF INCLUDING BOTH MEN AND WOMEN AT THE COMMUNITY LEVEL AS

UNCLAS SECTION 02 OF 02 STATE 219017

PARTICIPANTS AND BENEFICIARIES. PROGRAM IMPACT INDICATORS SHOULD BE AT THE PEOPLE-LEVEL AND SHOULD ALLOW DISAGGREGATION BY GENDER, TO THE EXTENT POSSIBLE.

(E) THE US-AEP DIRECTOR EXPRESSED HIS SUPPORT FOR THE PROJECT. THE BUDGET SHOULD CONTINUE TO INDICATE THAT THE US-AEP PLANS TO PROVIDE DOLS 1 MILLION FOR TECHNICAL AND PROJECT SUPPORT GRANTS DURING THE FIRST AND SECOND YEARS OF THE PROJECT. US-AEP WILL PROVIDE ON-SITE TECHNICAL ASSISTANCE TO MISSION AND RHUDO IN THE DRAFTING OF PP LANGUAGE DESCRIBING THE USE OF FUNDS AND THE SPECIFIC RELATIONSHIPS BETWEEN THESE ACTIVITIES AND OTHER US-AEP PROGRAMS. INFORMATION ON PERSONNEL TO PROVIDE SUCH TA WILL BE SUBJECT OF SEPTEL.

CHRISTOPHER

BT

#9017

NNNN

2/2

UNCLASSIFIED STATE 219017/02

**PROJECT DESIGN SUMMARY
Logical Framework**

ANNEX B

Life of Project
From FY 93 to FY 98
Total U.S. Funding Authority HG \$100 million
Date Prepared 8/93

Project Title and Number: HG Program for Urban Environmental Infrastructure
493-HG-004

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions												
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>assist Thailand to address key environmental infrastructure problems.</p>	<p>Measures of Goal Achievement:</p> <p>Increased number total urban households and low income households with:</p> <ul style="list-style-type: none"> - Potable water - Wastewater treatment - Environmentally sound solid waste disposal - Drainage 	<ul style="list-style-type: none"> - Mid-term Evaluation of Project - Final Evaluation of Project 	<p>Assumptions for achieving goal targets:</p>												
<p>Project Purpose:</p> <p>assist Thailand to develop a sustainable system for financing urban environmental infrastructure, which benefits urban households including low income families.</p>	<p>Conditions that will indicate purpose has been achieved: EOPS</p> <ul style="list-style-type: none"> - 10 cities have borrowed for urban environmental projects and citywide systems have improved. 	<ul style="list-style-type: none"> - Project Monitoring Reports. - Final Evaluation of Project. 	<p>Assumptions for achieving purpose:</p>												
<p>Outputs:</p> <p>Establishment of Facility to guaranty loans for municipal infrastructure.</p> <p>Loans are made for environmental infrastructure & overall investment increases.</p> <p>Participating cities increase revenue & become more credit worthy.</p> <p>U.S. suppliers provide goods and services for projects.</p>	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> - Facility with \$150 million guaranty funds and 1,000 million or more in loans over LOP. - An increase of 25% in local revenues of participating municipalities, minimum, over LOP. - 10 Thai cities introduced to U.S. suppliers of goods and services. - 2-3 BOO/BOT urban infrastructure projects identified. 	<ul style="list-style-type: none"> - Project Monitoring Reports. - Mid-term Evaluation of Project. 	<p>Assumptions for achieving Outputs:</p>												
<p>Inputs:</p> <p>100 million equivalent of RTG resources to Guaranty Facility.</p> <p>10 million additional equity from commercial Thai banks and financial institutions.</p> <p>1 million AEP grant for US technology and enhancements.</p> <p>.25 million Mission grants for project management and TA.</p>	<p>Implementation target (Type & Quantity):</p> <table border="1"> <tr> <td></td> <td>94</td> <td>95</td> <td>96</td> <td>97</td> <td></td> </tr> <tr> <td></td> <td>25</td> <td>25</td> <td>25</td> <td>25</td> <td>(HG Borrowing)</td> </tr> </table>		94	95	96	97			25	25	25	25	(HG Borrowing)	<p>Annual Budget Submission</p>	<p>Assumptions for providing inputs:</p>
	94	95	96	97											
	25	25	25	25	(HG Borrowing)										

**FEASIBILITY OF A GUARANTY FACILITY
FOR URBAN ENVIRONMENTAL PROJECTS IN THAILAND**

This analysis reviews requirements for successful guaranty facilities, the experiences with facilities around the world and in Thailand, and summarizes why a new facility is feasible.

A. REQUIREMENTS FOR SUCCESSFUL CREDIT GUARANTY PROGRAMS

Capital Adequacy

Successful credit guaranty agencies have substantial paid-in capital, which is invested in interest-bearing securities. Investment earnings are sufficient to keep the guaranty organization profitable even during the first years when operating revenues are relatively low. Capital is equal to at least 25% of anticipated outstandings at start-up, gradually declining as a percentage of outstandings in subsequent years.

Organizational Autonomy

Organizational autonomy is vitally important. Successful credit enhancement guaranty programs have the authority to make their own decisions, guided by their own managers and Board of Directors. They do not make business decisions solely for political reasons and are not required by government to undertake unprofitable operations unless they are acting as agent for the government, using government funds or committing the government to the related risk.

Support from Government

Support or at least benign neglect from Government is important for successful credit enhancement programs. This support is primarily in the form of the provision of funds on favorable terms, a reasonable and appropriate regulatory environment (e.g. tax and reserve policy requirements), and publicity given the guaranty agency by government to encourage use of the guaranty program.

Proper Risk-Sharing

Vital to success is requiring that commercial banks and borrowers share risks in every transaction. Losses may be limited by cofinancing and cooperative guaranty agreements with other government and private programs.

42

Appropriate Fee Structure

Successful guaranty programs operate on the principle that availability of credit is more important than cost, but also that the program itself must be profitable over the long-run in order to survive. Accordingly, fees reflect the real costs of doing business and maintaining the value of capital. This means that guaranty fees are designed to cover related claims and administrative expenses.

Diversity of Operations

In order to be fully successful, the guaranty programs must be flexible and have the ability to offer a range of programs to meet the varied financing needs. The needs for, and use of, these programs will vary over time, as will their profitability.

Quality of Management

Successful credit guaranty agencies are run by financial professionals who have extensive prior experience with the management of private financial institutions. They are personally familiar with the techniques of financing and are flexible, efficient, profit-conscious managers. In order to obtain and keep such individuals, the credit guaranty agency provides compensation comparable to that in private sector banks.

Efficiency of Procedures

Successful credit guaranty agencies keep paperwork and administrative procedures to the minimum. Average processing time for guaranties is one month or less, and internal analysis is structured to emphasize checklist procedures rather than extensive memo-writing. Discretionary commitment authority is given to officers within the organization.

Aggressive Marketing

Marketing familiarizes banks, municipalities and government agencies with programs and encourages their use. Marketing is directed to financial institutions, all types and sizes of municipalities and to all geographic regions of the country and is frequently done through third parties, such as banks and government agencies.

Skill in Credit Analysis

Successful credit guaranty agencies have guaranty executives with sound judgement, extensive experience, and mastery of the techniques of risk analysis. Losses due to inadequate analysis and structuring in the early years are reduced as the credit guaranty agency learns from its mistakes and upgrades its skills.

13

Appropriate Security for Credit Guaranty Operations

Security may consist of deposits of municipal resources, guaranties or pledge of funds from central government or other appropriate sources of funds. Hypothecations and other charges on real property may be made, but are not common due to the political and social implications of pledging public resources to private lending institutions. Guaranty underwriting policy emphasizes taking minimum security consistent with acceptable risk parameters for the whole portfolio.

Technical Sophistication

The credit guaranty agency must be able to utilize the latest techniques, change those techniques as necessary to meet the requirements of specific projects and conditions in the financial markets. To attract finance for large scale infrastructure projects on a syndicated basis from financial institutions, including foreign banks, the guaranty agency must be able to work with lenders and municipalities to structure appropriate, innovative financing packages. Financial engineering techniques used to finance private business projects may provide useful models for structuring municipal facilities.

B. SUMMARY OF EXPERIENCE IN OTHER COUNTRIES

Guaranty funds have been operating in some countries for over 25 years. In OECD countries, these funds are a means for stimulating growth and realignment. Two examples which support municipal as well as industrial investments can be found in France and the U.S. Thailand also has an example of a Guaranty Fund, although it is directed at small industry.

France's SOFARIS, (37.5% government owned), has set up fourteen special districts for regional and municipal rehabilitation and industrial renewal. Thirty-two per cent of the credit guarantees issued in 1991 were related to public works and regional rehabilitation. As of December, 1991, outstanding guarantees issued were almost \$1.5 billion. Only six percent of loans are in default.

In the U.S. guarantees are provided by the Small Business Administration. More than \$16 billion in guarantees have been issued. \$1.2 billion are performance guarantees supporting municipal services and public work contracts.

For this analysis, additional guaranty programs were reviewed many of which (e.g. Bolivia, Paraguay, and Costa Rica) were sponsored by USAID and those funded in part by the World Bank (i.e. Jamaica, Cameroon, Sri Lanka, Morocco and Portugal). Special attention was paid to the schemes in Malaysia, Indonesia and the Philippines which were deemed of special interest and relevance to Thailand. Guaranty Funds operating in Taiwan and Korea were considered to be not comparable in scope and purpose to the Thai Project. Attention was also given to IFCT's existing Small Industry Credit Guarantee Corporation.

The most striking aspect of the guaranty funds is their great diversity. The diversity extends to objectives, to structure and to operational mode. In principle, most if not all of the guaranty funds purport to facilitate the entry of the small (and medium) scale enterprise to the formal financial market institutions. But they differ greatly in their definition of the target groups, in designation of the financial institutions, and in type of credit made available.

Among the most frequently cited barriers to entry are commercial bank's risk aversion, lack of adequate collateral among borrowers, and the dearth of project-based term finance with generous grace period and extended loan duration. Although most, if not all, of the guaranty funds emphasize the lack of collateral as the principal rationale for the partial assumption of risk by the funds, none of them (with the possible exception of the Philippines ILGF) specifically imposes a ceiling on the borrower's collateral as a condition of eligibility.

The vast majority of the guaranty funds look to the commercial banks as the primary lenders and employ a variety of devices to insure their participation. The ILGF does so in essence, by providing the participating banks with funds obtained from external donors. The Indonesian Askrido uses state owned banks as a principal vehicle, and the two Malaysian funds rely on mandatory proportions imposed on total assets of the private commercial banks.

In fact, most of the guaranty funds either combine their guaranty operations with on-lending or rediscounting functions or else rely (as in Latin America) on extensive and elaborate supportive systems of technical assistance and training aiming both at the commercial banks personnel and at their clients.

The diversity of aims and objectives is reflected in the structure and operational modes of the funds. There is a great variety of arrangements in apportionment of authority, in allocating responsibility and in assumption of risks. The guaranty as a percentage of loan range from 25% to 90%. In some schemes the lenders assume full responsibility for appraisal and recovery (e.g.; the Thai SICGC), in others, a large part of the responsibility is vested in the guaranty authority and so on.

Given the great variety of the funds, it is difficult to generalize but a number of tentative conclusions do emerge:

- o Focused schemes appear to achieve their basic objectives better than multipurpose schemes.
- o Complex procedures for allocating responsibility between the lender and the fund authority add little to effectiveness of the scheme but cause delays and increase costs thus further impeding the genuine participation of the commercial lenders in the programs.
- o Guaranty funds, if they are to succeed in their developmental aims, must be prepared to face risks and to incur losses, within reason.

45

C. THAILAND'S SMALL INDUSTRY CREDIT GUARANTEE CORPORATION (SICGC)

The Small Industry Credit Guarantee Corporation (SECGC) is relevant as a model of a guaranty fund in Thailand, but its institutional structure not suitable for the new facility.

1. History

The SICGC was established by the Small Industry Guarantee Corporation Act, passed by Parliament on December 30, 1991. As a result of this Act, all business and operations of the former Small Industry Credit Guarantee Fund were transferred to the SICGC effective February 21, 1992.

The Small Industry Credit Guarantee Fund (SICGF) - The SICGF concept was first conceived by the Joint Government-Private Sector Consultative Committee on Industrial Development during the latter part of 1983. The Committee members mutually agreed that the main objective of the SICGF should be to provide credit guarantees for viable small industries which lacked the necessary collateral to obtain sufficient credit from commercial banks or the Industrial Finance Corporation of Thailand (IFCT).

Upon a proposal from the Ministry of Finance (MOF), the Cabinet passed a resolution to establish the SICGF on June 26, 1984 and appointed the IFCT as its administrator. The SICGF was meant to operate for five years and then be incorporated by Parliamentary resolution.

SICGF's Board of Directors (elected by the shareholders) agreed to pay management fees to the IFCT at the rate of 10% on the SICGF's net income. It was also proposed that, after five years of successful operation, the Government would consider establishing the SICGF as a fully juristic person.

The start-up capital of the SICGF was B200 million, equally shared by the private sector and the Ministry of Finance on behalf of the Government. With regard to the commercial institutions, the Krung Thai Bank and IFCT each held a share of B20 million while a major portion, B60 million, came from the Thai Banker's Association. Currently, shareholders are: commercial banks:

-	MOF	43.76%
-	IFCT	11.91%
-	Bangkok Bank Ltd.	11.91%
-	Krung Thai Bank Ltd.	9.19%
-	Thai Farmers Bank Ltd.	6.01%
-	Siam Commercial Bank Ltd.	2.96%
-	Bank of Ayudhya Ltd.	2.38%

46

- Bangkok Bank of Commerce	2.38%
- Bangkok Metro. Bank Ltd.	1.79%
- Thai Military Bank Ltd.	1.79%
- Siam City Bank Ltd.	1.79%
- First Bangkok City Bank	1.19%
- Bank of Asia Ltd.	1.19%
- Union Bk. of Bangkok Ltd.	0.60%
- Thai Danu Bank Ltd.	0.60%
- Nakornathon Bank Ltd.	0.30%
- Laem Thong Bank Ltd.	0.24%

On April 17, 1985, an Agreement on the Establishment and Operation of the SICGF was signed with the Regulation on Rules and Procedures instituted shortly thereafter. The SICGF began to offer its services in November, 1985 in four provinces which were proclaimed as small industrial development zones: Songkhla, Kanchanaburi, Phitsanulok and Khon Kaen. Seminars were then held in each of the provinces to introduce guarantee services to bankers and small entrepreneurs.

Following the initial introduction period in the field, evaluations were made and some rules and regulations of the SICGF were accordingly changed to

meet the customers' demands. In May, 1986, the SICGF extended its services nationwide. Small entrepreneurs were able to ask for SICGF services from any commercial bank branch, IFCT and its regional offices.

Operations of the SICGF required fund review of complex guaranty applications and, in most cases, field review of loans prior to guaranty approvals. Technical assistance from ADB and IFCT's experience in broad banking activities provided evidence that staff were capable of carry out the activities SICGF required.

In 1987, the SICGF joined USAID in its Rural Industries and Employment Project (RIE) and was granted US\$8 million or approximately B200 million to establish the Small Industries Guarantee Facility (SIGF). The operation of the USAID sponsored SIGF was far simpler to manage than that of the SICGF primarily because of much simpler application procedures and no requirement for IFCT review of loans prior to guaranty approval. In essence, the SICGF served as the custodian of the SIGF guaranty funds. Since the staff at that time were expected to be almost fully occupied with operating the SICGF, additional staff were required to manage the SIGF second window. USAID's RIE project provided funding for such staff in the form of a \$40,000/year budget for administrative expenses. Guaranty fees, charged at 1.5% per annum, were accumulated to cover guaranty payments by the SIGF for defaulted loans. Due to policy changes, however, USAID requested that the SIGF be phased out in 1990.

In 1990 the SICGF become a statutory corporation, the SICGC.

2. Organization and Guidelines

The shareholders of the new corporation, SICGC, namely, the Ministry of Finance, the Thai Banker's Association, the Krung Thai Bank, the IFCT and commercial banks, remained unchanged from those of the SICG Fund. The SICGC is currently 52.94% government owned, although the MOF intends to sell part of its holdings in order to reduce the RTG share to less than 50%. The policies and operations of the SICGC are formulated and supervised by the Board Of Directors. The Board of Directors consist of representatives from the SICGC's shareholders and are:

Chairman

Mr. Suphachai Phisitvanich
 Director-General
 The Excise Department, MOF

Directors

Dr. Somchai Richupan
 Director General
 The Fiscal Policy Office, MOF

Mr. Aswin Kongsiri
 General Manager
 IFCT

Dr. Sathit Uthaisri
 Senior V.P.
 Bangkok Bank

Mrs. Ninlavan Vudthivat
 Assist. Managing Director
 Thai Danu Bank

Mr. Anuchata Chaiprapha
 Advisor
 Thai Military Bank

Mr. Padetpai Meekun-Iam
 Director, Planning Division
 Department of Industrial
 Promotion, MoInd

Mrs. Rasaporn Nivadawong
 Manager, Government Credit Policy Department
 Krung Thai Bank

Mr. Chinsuk Viravan
Director & Secretary to the Board
 SICGC

Mr. Suphot Kitisuwan
Advisor to the Board
 Director, Banking Department
 Bank of Thailand

The SICGC is divided into three departments: the Credit Guarantee Department, the Business Promotion Department and the Administration Department.

For small industries who wish to use the guaranty service of the SICGC, the following criteria must be met:

1. The total net fixed assets on the date of loan application shall not exceed B20 million.
2. The minimum loan applied from the financial institution shall be B200,000 and the maximum amount, including existing credit lines, shall not exceed B10 million.
3. The small business shall be a natural person or juristic person who has Thai nationality and operates its business in Thailand.
4. The small business shall have equity in the project of not less than 20% of total investment.

If small businesses meet the above criteria, then the SICGC will guarantee 100% of the unsecured credit but not exceeding 50% of the total credits with the lender. For all guaranties, the SICGC charges a guaranty fee in advance at an annual rate of 1.5% and sets up provision for guaranty payments at the rate of 0.5% of liabilities on guaranties at the end of the year, or an amount based on a review of the individual borrowers' financial condition, whichever is greater. In the case of default, SICGC will pay guaranty compensation to the lender after a civil court has ruled a final judgement against the borrower on the amount stated in the Letter of Guarantee, including accrued interest up to the date of the final judgement.

3. Lending History

After experiencing three years of growth, the number of new guaranty approvals provided by the SICGC has remained relatively flat since 1990. Average loan size has been around \$37,000 over the last 7 1/2 years. The rate of default during the SICGF's existence never exceeded 8% for any one year and averaged a little over 4% over its six years of operation. On the other hand, the SICGC has been able to reduce the rate of default significantly and has even maintained a net credit to its guaranty payment reserves due to remittances from banks which once received guaranty payments but later collected on bad loans. The size of the SICGC's guaranty fund currently stands at around \$18 million with only 1.3 times this amount in outstanding liabilities on guaranties.

4. Lessons for the New Guaranty Facility for Environmental Infrastructure

The apparent lack of enthusiasm on the part of the banks to use the SICGC is most likely due to two factors. First, the average size of loans made to new borrowers is quite small in comparison with most industries' credit needs (and in comparison to the size of loans

expected for environmental projects). The banks incur the same administrative costs for these small loans, with a much smaller profit margin they do for larger loans. Banks probably lose money on many loans. Secondly, the guaranty that is issued by SICGC has no effect on the interest rate of bank loans to the small industries. The lending history has shown that banks are reluctant to reduce the normal 2 to 3 points above prime rate that they charged to borrowers. Thus, there is little incentive for prospective lenders and borrowers to use the SICGC guaranty.

D. THE FEASIBILITY OF A NEW GUARANTY FACILITY FOR ENVIRONMENTAL INFRASTRUCTURE

The proposed facility appears feasible, legally, technically and financially.

- o It will have substantial paid-in capital from the MOF and participating banks.
- o Set up as a corporation, with majority on the board of directors from participating financial institution, it should have organizational autonomy.
- o The proposal clearly has support from Government. The MOF is taking the lead in establishing a facility. The impetus behind the RTG is its intention to reduce grants, and decrease the central government's funding of municipal public works (currently about 75%). The only way to do this is to let municipalities borrow in their own name.
- o Risk is shared since commercial banks will have equity in the facility.
- o Appropriate security in place of collateral is likely to come from special deposits of municipal resources which would be used as first line guaranties against default, and BOT projects will offer other forms of collateral
- o With a guaranty, banks will use their "special prime" plus two percent risk and profit and two percent administrative costs. This four point spread is adequate for banks to participate.
- o An appropriate fee structure can be established, based on the needs of the banks, and the experience gained in other guaranty facilities. One of the problems encountered in Thailand's SICGC was that the fee structure did not cover administrative costs for very small loans. Environmental projects will involve much larger loans.

50

- o In general there are no legal impediments to the creation of a new Facility. A Cabinet resolution is all that is required initially. Operations can begin immediately. Parliamentary approval will be sought later, as was the case for the SICGF.

If there are doubts about the feasibility of the proposed Guaranty Facility, they relate to the perceived capacity of municipalities to borrow. This subject is analyzed in ANNEX C.2.

51

THE DEBT CAPACITY OF MUNICIPALITIES

A. THE CURRENT SITUATION OF MUNICIPALITIES

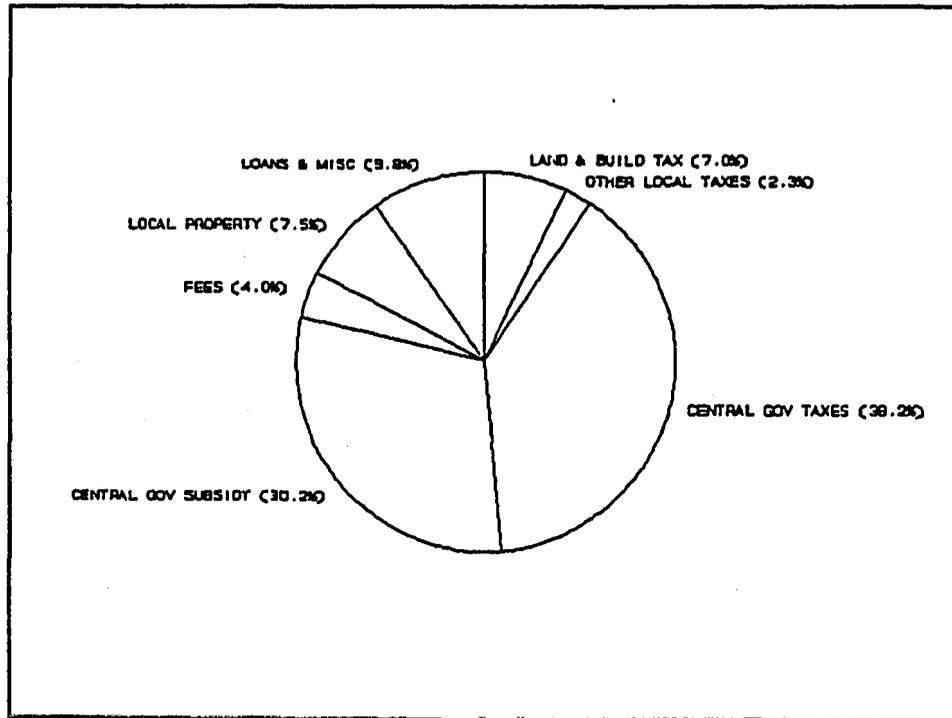
Given the Central Government's intention to reduce grants, and decrease its present level of funding (close to 75%) of municipal public works, there seems little doubt that municipalities will take on greater responsibility for borrowing for services and infrastructure. The question is one of time: how quickly will steps be taken to strengthen local revenue generation, and to decentralize the authority for borrowing decisions.

1. Revenue Sources

There are six major sources of revenues of most local governments in Thailand. They are (1) local-levied taxes; (2) surcharged taxes; (3) shared taxes; (4) other non-tax revenues such as license fees and fines; (5) central government grants and subsidies; and, to a very limited extent, (6) municipal borrowing.

Figure 1: Sources of Municipal Revenue

Taxes are either collected and retained by the municipality or are collected by the central government and redistributed to municipalities. There are four types of taxes collected and retained by municipalities: a) the Building and Land Tax, b) the Local Development Tax, the Signboard Tax and the Animal Slaughter Tax. The most significant of these



four levies is the Building and Land Tax. It accounts for three-quarters of the revenue raised, by these taxes and is assessed on the gross rental value of a property. (The tax is not levied on owner occupied buildings.) It should be noted, however, that property taxes in Thailand

52

represent only about 0.18% of GDP, compared with 0.40% in Indonesia, Korea and the Philippines and about 2.0% in Australia and New Zealand.

Centrally collected taxes which provide revenue for municipalities include a surcharge on the business tax, a surcharge on the liquor tax, a surcharge on the gambling tax and an excise tax on nonalcoholic beverages. In addition, municipalities share the proceeds from the motor vehicle tax with provincial governments.

General subsidies and project specific grants are another source of municipal revenue. One general subsidy provides 100 baht per capita to all municipalities, while another is primarily used to cover teacher salaries. Project grants provide funds for specific projects and is negotiated on a case-by-case basis. Typically, project grants underwrite the cost of developing or upgrading infrastructure.

Municipalities are also able to borrow funds to finance specific development projects. Sources of loaned funds include: the Municipal Development Fund, the Sanitary District Development Fund, the Provincial Authority Development Fund and banks. (The fund is financed by municipalities contributing 10% of their budget each year to the fund. Municipalities are allowed to borrow funds equal to their contribution at no interest once every four years. In addition they can borrow an amount equal to ten times their contribution at concessional rates of around 4%. Municipalities can also borrow from Sanitary and Provincial funds in some circumstances.

In sum, total locally-levied taxes--of which the two major taxes are the house and rent tax and the local development tax--and other taxes, fees and fines have never exceeded 55-60 percent of the total revenues of all municipalities combined. However, the proportion of grants and subsidies received from the central government consistently amount to around 40 percent of total revenues. It is safe to conclude that the self-financing characteristic of municipal governments through local tax collection is less than effective than it should be, but this can be strengthened.

2. Local Expenditures

Local spending is primarily for recurrent purposes, with salaries accounting for over two-thirds of most municipal budgets. Capital investments generally are made either from recurrent budget surpluses or from national grants. Little use is made of loans for capital investment.

Localities are required (by DOLA) to maintain cash flow reserves equal to about three months worth of salary spending to compensate for any lags in budget approval, local collection shortfalls, disasters, or delays in transfer payments from the Ministry of Finance.

Overall, DOLA estimates that less than 10 percent of total governmental spending in Thailand takes place at the municipal level; and if Bangkok is excluded from the calculation, local governments are responsible for only about 2 percent of total spending. This contrasts sharply with the situation in the U.S. and Western Europe, where about half of all spending takes place at subnational levels.

Table 1

Municipal Revenue Sources

Tax	Collecting Agency	Description	Rate	Distribution
Building and Land Tax	Municipality	Tax on annual rent for houses & buildings used for commercial purposes. Owner-occupied structures exempted.	12.5% of annual rent. Manufacturing property taxed at 1/3 normal rate.	Retained by municipality
Land Development Tax	Municipality	Tax on assessed value of land. Exemptions: land subject to house & rent tax, small agricultural plots, government land & religious land	Rises from .5 baht to 70 baht per rai depending on size of holding.	Retained by municipality
Slaughter Tax	Municipality	Tax on slaughter of animals above a minimum number	10 to 30 baht per head depending on type of animal	Retained by municipality
Signboard Tax	Municipality	Tax on area and number of characters on a signboard	Ranges from 1 baht per 500 sq cm for Thai signs to 20 baht per 500 sq cm for foreign languages	Retained by municipality
Surcharge on Business Tax	Ministry of Finance	Surcharge on businesses at point of manufacture	10% surcharge on basic rate	Distributed in proportion to 1960 local collections
Surcharge on Liquor Tax	Ministry of Finance	Taxes on raw and distilled liquor and fees for distribution rights	6 baht per liter for raw liquor, 50 baht for distilled. 2000 baht fee to sell.	Distributed by share of national population
Excise Tax	Ministry of Finance	Tax on non-alcoholic beverages and other commodities of daily life (e.g. matches)	.2 baht per cu cl on beverages in containers 1% to 10% surcharge on commodities	Distributed by share of tax collected in the locality
Surcharge on Gambling Tax	Ministry of Finance	Tax on betting at races	10% surcharge on betting taxes	Distributed by share of tax collected in the locality
Motor Vehicle Registration Tax	National Police Department	Tax on motor vehicles	Based on weight of vehicle	Provinces 25% Municipal 45% San dist. 25% based on pop.
Fees and licenses	Municipality	Fees and licenses cover 113 subjects	Varies	Retained by municipality
Revenue from locally owned property	Municipality	Rental income, utility income and interest on municipal bank accounts	Rates set by locality	Retained by Municipality
General Subsidy	Central Government	Central government grant	100 baht per capita	Transfer from central gov.
Specific Subsidy	Central Government	Central government grant to finance specific dev. projects	Varies. Subsidizes all or part of dev. project	Transfer from central gov.

Source: Coopers & Lybrand, "Financing Regional Cities Infrastructure," February 1986.

54

3. Experience with Borrowings

Four municipalities (outside Bangkok) are known to have received commercial bank loans for infrastructure projects. These loans were made as part of the World Bank-sponsored RCDP I Project. The four municipalities (Chiang Mai, Nakhon atchasi, Songkhla, Khon Kaen) borrowed from three sources for projects built in 1984-1986. Twenty-eight percent of the B1,243 million projects were funded by the cities. Of the B348 million required, the cities used 39% (B135 million) of their own budget resources and borrowed 61% (B212 million) from three sources on the following terms:

	Percent of Funding	Amount (B Ms)	Term (Years)	Interest Rate
Municipal Development Fund	14%	48	10	4%
Sanitary Development Fund	14%	48	10	4%
Krung Thai	33%	115	10	13.5%

The Krung Thai loans are the only commercial bank loans to municipalities to date. Because Krung Thai is primarily a government-owned bank, the MOF guaranteed repayment of these loans. The four municipalities have been paying the loans as agreed.

4. Current Borrowing Capacity

The current debt situation of the city of Nonthaburi is an example for other cities in terms of increasing their borrowing capacity. The city's present level of debt service, B11.572 million, represents 7.4% of total revenues (B156.154 million) and 10.2% of city-generated income (B113.464 million - See Table 2). Statutory reserves and accumulated surplus (B63.182 million), represent 69% of Nonthaburi's total outstanding debt (B92.240 million - see Table 6).

Some steps could be taken immediately at the local level to increase borrowing capacity. Financial management techniques of local government appear quite simple. Techniques such as pooling of funding and leveraging are not now used, but could be introduced. Specific examples of revenue enhancement techniques and avenues for increasing debt capacity follow (N.B.: additional debt is assumed to be 20 year term at 12% interest p.a.).

ACTIONS TAKEN AT THE LOCAL LEVEL

4.1. Change in Property Tax Administration

Local property taxes generally account for only about 15 percent of the revenue base in most Thai municipalities. Various studies have been done on changing the system for assessing property taxes in Thailand. If changes are made, this could represent the single most significant tax for municipalities. However, in the meantime, studies in cities such as Chiang Mai and Samut Prakan show that municipal revenues from this source could be increased by at least sixty percent by simply enforcing or slightly increasing the collection of already existing taxes or user's fees.

Table 2 - NONTHABURI CITY BUDGET

RATE OF EXCHANGE: \$1 = 25 BAHT

REVENUE (,000)	ACTUAL		ACTUAL		ESTIMATED		% OF TOTAL (3 YR. AVG.)
	1991	1991	1992	1992	1993	1993	
	B	\$	B	\$	B	\$	
LOCAL & SHARED TAXES 1/	68,327	2,733	85,852	3,434	84,985	3,399	42.8%
PERMITS, FEES & FINES	9,793	392	10,613	425	8,798	352	5.2%
INCOME /PROPERTIES	12,441	498	17,742	710	13,891	556	7.9%
INCOME FROM PUBLIC UTILITIES AND BUSINESSES	3,164	127	3,482	139	4,650	186	2.0%
MISCELLANEOUS	1,332	53	653	26	1,140	46	0.6%
////// TOTAL LOCAL & SHARED REVENUES	95,057	3,802	118,342	4,734	113,464	4,539	58.5%
////// OTHER REVENUES							
RTG TRANSFERS (PER CAPITA SUBSIDY) 2/	15,157	606	24,489	980	24,924	997	11.6%
RTG TRANSFERS (GENERAL PURPOSE SUBSIDY) 3/	15,893	636	14,219	569	17,766	711	8.6%
RTG TRANSFERS (SPECIFIC PROJECT GRANT) 4/	18,156	726	46,658	1,866	0	0	11.6%
MUNICIPAL RESERVE FUND 5/	4,161	166	10,412	416	0	0	2.6%
CASH FLOW FROM LOANS 6/	10,177	407	29,682	1,187	0	0	7.1%
////// TOTAL NON RECURRENT REVENUES	63,544	2,542	125,460	5,018	42,690	1,708	41.5%
////// GRAND TOTAL REVENUES	158,601	6,344	243,802	9,752	156,154	6,246	100.0%
//////							

- 1/ Includes property taxes collected by the municipality and other taxes (e.g., VAT, vehicle, excise, etc.) collected by the RTG and redistributed to the municipalities
- 2/ Annual subsidy, based on population, that is used for general expenditures
- 3/ Annual subsidy that is primarily used for teacher salaries
- 4/ For specific projects proposed by the municipality and either approved or disapproved by DOLA based on the size of the project, urgency, and RTG budget.
- 5/ Withdrawals made to cover shortfalls in capital investments
- 6/ Usually 10 year, 4% interest p.a. loans provided to the municipality from DOLA's Municipal Development Fund

50

EXPENDITURES (,000)	ACTUAL		ACTUAL		ESTIMATED		% OF TOTAL (3 YR. AVG.)
	1991	1991	1992	1992	1993	1993	
	B	\$	B	\$	B	\$	
GENERAL BUDGET EXPENSE	3,733	149	10,886	435	20,232	809	6.5%
<i>Debt Service 1/</i>	0	0	3,823	153	11,572	463	2.9%
<i>General Obligations 2/</i>	2,925	117	6,330	253	7,660	306	3.1%
<i>Contingency</i>	808	32	733	29	1,000	40	0.5%
FIXED RECURRENT EXPENSES	60,889	2,436	73,809	2,952	77,113	3,085	39.4%
PRE CAPITAL INVESTMENT EXPENSES	36,567	1,463	49,105	1,964	13,875	555	18.5%
TOTAL MUNICIPAL EXPENSES	101,189	4,048	133,800	5,352	111,220	4,449	64.4%
FUNDED BY LOCAL & SHARED TAX RECEIPTS	101,189	4,048	133,800	5,352	111,220	4,449	64.4%
FIXED & RECURRENT EXPENSES	300	12	256	10	24,924	997	4.7%
FUNDED BY PER CAPITA GRANT	14,909	596	14,213	569	17,741	710	8.7%
FIXED & RECURRENT EXPENSES	18,157	726	46,658	1,866	0	0	12.1%
FUNDED BY GENERAL PURPOSE GRANT	33,366	1,335	61,127	2,445	42,665	1,707	25.5%
INVESTMENT EXPENSES FUNDED BY SPECIAL PROJECT GRANT	4,193	168	10,412	416	0	0	2.7%
TOTAL EXPENSES AND INVESTMENT EXPENSES & INVESTMENTS	10,177	407	29,682	1,187	0	0	7.4%
FUNDED BY ACCUMULATED SAVINGS	14,370	575	40,094	1,604	0	0	10.1%
EXPENDITURE/LAND & CONSTRUCTION	148,925	5,957	235,021	9,401	153,885	6,155	100.0%
FUNDED BY LOANS	(6,132)	(245)	(15,458)	(618)	2,244	90	-3.5%
INVESTMENT & EXPENSES FUNDED BY LOANS AND ACCUMULATED SAVINGS	9,676	387	8,781	351	2,269	91	3.7%
GRAND TOTAL CAPITAL INVESTMENT AND BUDGET EXPENSES							
LOCAL & SHARED REVENUE BUDGET SURPLUS / DEFICIT							
LOCAL & SHARED REVENUE BUDGET + RTG TRANSFERS SURPLUS / DEFICIT							

1/ Annual principal and interest payments on Municipal Development Fund loans

2/ Includes annual payments to Municipal League of Thailand, traffic police, fire protection, national pension plans and social security, etc.

5

4.2. Increasing Average Debt Ceiling

Simply allowing a somewhat higher debt service level would greatly affect the independence of municipalities. As a possible starting point, about 10 percent of total recurrent revenues might be authorized to be used for debt service at any one time, as compared with up to 15% on average in other countries. Table 3 illustrates the potential increased debt capacity of five typical cities if only 10% of a municipality's local revenues were to be dedicated to debt service.

Table 3 – Increasing Present Debt Service to 10% of Local Revenues (.000 Baht)

<i>City</i>	<i>Local Revenue</i>	<i>Annual Debt Payment</i>	<i>Percent of Local Revenue</i>	<i>Additional Debt Payment</i>	<i>Additional Debt Capacity</i>	<i>US\$ (.000)</i>
Nakhon Ratchasima	165,470	8,188	4.95%	8,359	62,437	\$2,497.48
Udon Thani	140,112	4,630	3.30%	9,381	70,072	\$2,802.89
Nakhon Sawan	172,163	0	0.00%	17,216	128,596	\$5,143.85
Phitsanulok	101,113	409	0.40%	9,702	72,471	\$2,898.83
Samut Prakan	86,726	782	0.90%	7,891	58,938	\$2,357.54

By adjusting upwards the percentage of their budgets used for debt service, the cities shown above could increase present capital investment by 2-10 times.

4.3. Surplus Revenues

A different approach involves allowing any surplus of recurrent revenues to be devoted either to "pay as you go" capital spending (the current Thai system) or to debt service, subject to what the market would bear as the outer limits on debt service. This is generally the approach taken in Anglophone-type municipal budgeting systems in Africa or other Asian countries. A quick survey of the potential increased debt capacity of five typical cities using this approach is illustrated in Table 4 below.

Table 4 – Using Average Annual Surplus as Debt Payment (.000 Baht)

<i>City</i>	<i>Average Annual Surplus</i>	<i>Additional Debt Capacity</i>	<i>US\$ (.000)</i>
Nakhon Ratchasima	29,138	217,645	\$8,705.79
Udon Thani	27,279	203,759	\$8,150.36
Nakhon Sawan	25,100	187,483	\$7,499.32
Phitsanulok	12,159	90,821	\$3,632.84
Samut Prakan	7,598	56,753	\$2,270.11

If both annual budget surplus and 10% of local revenues were used towards debt service, then the additional debt capacity of municipalities in Thailand would increase significantly. Table 5 shows that five cities alone could increase their present debt capacity by 5-30 times, amounting to an additional investment of \$45 million in capital projects.

58

Table 5 – Using Average Annual Surplus as Debt Payment + Increasing Present Debt Service to 10%

<u>City</u>	<u>Average Annual Surplus</u>	<u>Additional Debt Capacity</u>	<u>Additional Debt Payment</u>	<u>Additional Debt Capacity</u>	<u>Total</u>	<u>US\$ (,000)</u>
					<u>Additional Debt Capacity</u>	
Nakhon Ratchasima	29,138	217,645	8,359	62,437	280,082	\$11,203.27
Udon Thani	27,279	203,759	9,381	70,072	273,831	\$10,953.25
Nakhon Sawan	25,100	187,483	17,216	128,596	316,079	\$12,643.17
Phitsanulok	12,159	90,821	9,702	72,471	163,292	\$6,531.67
Samut Prakan	7,598	56,753	7,891	58,938	115,691	\$4,627.65
				Grand Total		\$45,959.01

B. FURTHER ENHANCING THE CAPACITY OF MUNICIPALITIES TO BORROW

Additional steps can be taken to expand significantly the capacity of municipalities to borrow. Some actions could be taken as temporary measures until local revenue generation improves. Others might be more permanent.

1. Earmarking Special Project Grants for Debt Service

One immediate step has been proposed which has generated a great deal of interest in the RTG. Currently funds which are earmarked for direct transfer for capital expenditures on projects could be earmarked for debt services. Using Nonthaburi again as an example, there is presently little room for upward adjustment of the level of debt service based on annual budget surpluses or increased percentage of local revenues dedicated to debt service (as mentioned earlier, Nonthaburi's debt service level is already around 10% of local revenues). However, Nonthaburi has the potential to increase current debt carrying capacity by 300% when project grants are used for debt service and the city's repayment of the loan is guaranteed by the Guaranty Facility (see Table 6). This approach should also appeal to the RTG as they could gradually phase out special project grants as municipalities increase their locally generated revenues.

2. Revenue-Backed Loans or Bonds

Revenue-supported loans or bonds are likely to prove realistic for some large Thai cities, especially to the degree the municipalities can develop dependable sources of fees (e.g., if they have their own user fee-supported water systems). In such cases, it would be reasonable for them to take on capital debt for investment in the system, provided that they covenanted to charge fees sufficient to cover both O&M and debt service. This practice has been adopted as the most common basis for the sale of revenue bonds in the U.S.

3. Revolving VAT Funds

This particular revenue enhancement scheme is one that would provide a new income base for municipalities and would have no adverse effect on debt service or local economies. This enhancement is focused on the added value tax (VAT), generated by local businesses and

Table 6 -

CITY DEBT SERVICE WARRANT GUARANTEE FUND

A. Current Debt Schedule

Parameters

- B 25 = US\$1
- 4.4% Annual Interest Rate
- 10 Year Term on Municipal Development Fund (MDF) Loans
- Current Debt = 92,240,450

<u>Fiscal Year</u>	<u>Current Debt</u>	<u>Principal Payment</u>	<u>Interest Payment</u>	<u>Total Debt Payment</u>	<u>Outstanding Debt</u>
1993	92,240,450	7,558,436	4,013,844	11,572,280	84,682,014
1994	84,682,014	7,887,341	3,684,939	11,572,280	76,794,674
1995	76,794,674	8,230,559	3,341,721	11,572,280	68,564,115
1996	68,564,115	8,588,712	2,983,568	11,572,280	59,975,403
1997	59,975,403	8,962,449	2,609,831	11,572,280	51,012,954
1998	51,012,954	9,352,451	2,219,829	11,572,280	41,660,503
1999	41,660,503	9,759,423	1,812,857	11,572,280	31,901,081
2000	31,901,081	10,184,104	1,388,176	11,572,280	21,716,976
2001	21,716,976	10,627,265	945,015	11,572,280	11,089,711
2002	11,089,711	11,089,711	0	11,572,280	0

B. Additional Debt on New Borrowings Covered by Guaranty Fund

Assumptions

- 20 Year Term
- 12% Annual Interest Rate
- 2% Guaranty Fee on Outstanding Principal Paid into Sinking Fund
- 300% Increase in Current Debt (1994)
- New Loan = 254,046,043

<u>Fiscal Year</u>	<u>Current Debt</u>	<u>Principal Payment</u>	<u>Interest Payment</u>	<u>Total Debt Payment</u>	<u>Outstanding Debt</u>	<u>Guaranty Fee</u>
1995	254,046,043	3,525,849	30,485,525	34,011,374	250,520,194	5,080,921
1996	250,520,194	3,948,951	30,062,423	34,011,374	246,571,243	5,010,404
1997	246,571,243	4,422,825	29,588,549	34,011,374	242,148,418	4,931,425
1998	242,148,418	4,953,564	29,057,810	34,011,374	237,194,854	4,842,968
1999	237,194,854	5,547,992	28,463,382	34,011,374	231,646,862	4,743,897

10

<u>Fiscal Year</u>	<u>Current Debt</u>	<u>Principal Payment</u>	<u>Interest Payment</u>	<u>Total Debt Payment</u>	<u>Outstanding Debt</u>	<u>Guaranty Fee</u>
2000	231,646,862	6,213,751	27,797,623	34,011,374	225,433,111	4,632,937
2001	225,433,111	6,959,401	27,051,973	34,011,374	218,473,710	4,508,662
2002	218,473,710	7,794,529	26,216,845	34,011,374	210,679,181	4,369,474
2003	210,679,181	8,729,873	25,281,502	34,011,374	201,949,308	4,213,584
2004	201,949,308	9,777,457	24,233,917	34,011,374	192,171,851	4,038,986
2005	192,171,851	10,950,752	23,060,622	34,011,374	181,221,098	3,843,437
2006	181,221,098	12,264,843	21,746,532	34,011,374	168,956,256	3,624,422
2007	168,956,256	13,736,624	20,274,751	34,011,374	155,219,632	3,379,125
2008	155,219,632	15,385,019	18,626,356	34,011,374	139,834,614	3,104,393
2009	139,834,614	17,231,221	16,780,154	34,011,374	122,603,393	2,796,692
2010	122,603,393	19,298,967	14,712,407	34,011,374	103,304,426	2,452,068
2011	103,304,426	21,614,843	12,396,531	34,011,374	81,689,582	2,066,089
2012	81,689,582	24,208,624	9,802,750	34,011,374	57,480,958	1,633,792
2013	57,480,958	27,113,659	6,897,715	34,011,374	30,367,299	1,149,619
2014	30,367,299	30,367,299	3,544,076	34,011,374	0	607,346
2015	0	0	0	0	0	0

C. Revenues

Assumptions

- 5% Annual Increase in Local Revenue
- 3% Annual Increase in RTG Per Capita & General Purpose Subsidies
- 10% Annual Decrease in Special Project Grants (1995-1999)
- 15% Annual Decrease in Special Project Grants (1995-2004)
- 20% Annual Decrease in Special Project Grants (2005-2009)
- Phase Out Special Project Grants in 2010
- 10.5% Interest p.a. on Accumulated Sinking Fund Deposits (One year promissory note)

<u>Fiscal Year</u>	<u>Local Revenues</u>	<u>RTG Subsidies</u>	<u>Total Operating Revenues</u>	<u>Special Proj. Grants</u>	<u>Reserves</u>	<u>Loans</u>	<u>Sinking Fund Interest</u>	<u>Total Revenues</u>
1992	118,341,732	38,708,000	157,049,732	46,658,000	10,411,500	29,682,150	0	243,800,817
1993	113,464,000	42,690,000	156,154,000	0	0	0	0	156,154,000
1994	119,137,200	43,970,700	163,107,900	48,057,740	0	254,046,043	0	465,211,683
1995	125,094,060	45,289,821	170,383,881	43,251,966	0	0	533,497	214,169,344
1996	131,348,763	46,648,516	177,997,279	38,926,769	0	0	1,059,589	217,983,637
1997	137,916,201	48,047,971	185,964,172	35,034,092	0	0	1,577,389	222,575,653
1998	144,812,011	49,489,410	194,301,421	31,530,683	0	0	2,085,900	227,918,005
1999	152,052,612	50,974,093	203,026,704	28,377,615	0	0	2,584,010	233,988,329
2000	159,655,242	52,503,315	212,158,558	24,120,973	0	0	3,070,468	239,349,998

<u>Fiscal Year</u>	<u>Local Revenues</u>	<u>RTG Subsidies</u>	<u>Total Operating Revenues</u>	<u>Special Proj. Grants</u>	<u>Reserves</u>	<u>Loans</u>	<u>Fund Interest</u>	<u>Total Revenues</u>
2001	167,638,004	54,078,415	221,716,419	20,502,827	0	0	3,543,878	245,763,124
2002	176,019,905	55,700,767	231,720,672	17,427,403	0	0	4,002,672	253,150,747
2003	184,820,900	57,371,790	242,192,690	14,813,292	0	0	4,445,099	261,451,081
2004	194,061,945	59,092,944	253,154,889	12,591,298	0	0	4,869,192	270,615,379
2005	203,765,042	60,865,732	264,630,774	10,073,039	0	0	5,272,753	279,976,566
2006	213,953,294	62,691,704	276,644,999	8,058,431	0	0	5,653,317	290,356,747
2007	224,650,959	64,572,455	289,223,414	6,446,745	0	0	6,008,125	301,678,285
2008	235,883,507	66,509,629	302,393,136	5,157,396	0	0	6,334,087	313,884,619
2009	247,677,682	68,504,918	316,182,600	4,125,917	0	0	6,627,739	326,936,256
2010	260,061,566	70,560,065	330,621,632	0	0	0	6,885,207	337,506,838
2011	273,064,645	72,676,867	345,741,512	0	0	0	7,102,146	352,843,658
2012	286,717,877	74,857,173	361,575,050	0	0	0	7,273,694	368,848,744
2013	301,053,771	77,102,889	378,156,659	0	0	0	7,394,404	385,551,063
2014	316,106,459	79,415,975	395,522,435	0	0	0	7,458,175	402,980,610
2015	331,911,782	81,798,455	413,710,237	0	0	0	7,458,175	421,168,412

D. Expenditures

Assumptions

4.5% Annual Increase in Operating Expenditures (Excluding Debt Service)

100% of RTG Special Project Grants Used for Debt Service, Remainder for Capital Investment (1994...)

<u>Fiscal Year</u>	<u>Operating Expenditures</u>	<u>Debt Service</u>	<u>Guaranty Fee</u>	<u>Special Govt. Grants</u>	<u>Reserves</u>	<u>Loans</u>	<u>Total Expenditures</u>	<u>Debt as % of Total Revenues</u>
1992	129,977,022	3,822,870	0	46,658,000	10,411,500	29,682,150	235,020,160	1.6%
1993	142,313,000	11,572,280	0	0	0	0	153,885,280	7.4%
1994	148,717,085	11,572,280	0	36,485,460	0	254,046,043	450,820,868	5.5%
1995	155,409,354	45,583,654	5,080,921	0	0	0	206,073,929	21.3%
1996	162,402,775	45,583,654	5,010,404	0	0	0	212,996,833	20.9%
1997	169,710,900	45,583,654	4,931,425	0	0	0	220,225,979	20.5%
1998	177,347,890	45,583,654	4,842,968	0	0	0	227,774,513	20.0%
1999	185,328,545	45,583,654	4,743,897	0	0	0	235,656,097	19.5%
2000	193,668,330	45,583,654	4,632,937	0	0	0	243,884,921	19.0%
2001	202,383,405	45,583,654	4,508,662	0	0	0	252,475,721	18.5%
2002	211,490,658	45,583,654	4,369,474	0	0	0	261,443,786	18.0%
2003	221,007,737	34,011,374	4,213,584	0	0	0	259,232,695	13.0%
2004	230,953,085	34,011,374	4,038,986	0	0	0	269,003,446	12.6%
2005	241,345,974	34,011,374	3,843,437	0	0	0	279,200,786	12.1%

<u>Fiscal Year</u>	<u>Operating Expenditures</u>	<u>Debt Service</u>	<u>Guaranty Fee</u>	<u>Capital Investment</u>			<u>Total Expenditures</u>	<u>Debt as % of Total Revenues</u>
				<u>Special Govt. Grants</u>	<u>Reserves</u>	<u>Loans</u>		
2006	252,206,543	34,011,374	3,624,422	0	0	0	289,842,340	11.7%
2007	263,555,838	34,011,374	3,379,125	0	0	0	300,946,337	11.3%
2008	275,415,850	34,011,374	3,104,393	0	0	0	312,531,617	10.8%
2009	287,809,564	34,011,374	2,796,692	0	0	0	324,617,630	10.4%
2010	300,760,994	34,011,374	2,452,068	0	0	0	337,224,436	10.1%
2011	314,295,239	34,011,374	2,066,089	0	0	0	350,372,702	9.6%
2012	328,433,524	34,011,374	1,633,792	0	0	0	364,083,690	9.2%
2013	343,218,258	34,011,374	1,149,619	0	0	0	378,379,252	8.8%
2014	358,663,080	34,011,374	607,346	0	0	0	393,281,800	8.4%
2015	374,802,918	0	0	0	0	0	374,802,918	0.0%

E. Cash Flow

<u>Fiscal Year</u>	<u>Total Revenues</u>	<u>Total Expenditures</u>	<u>Surplus/ (Deficit)**</u>	<u>Reserves</u>
1992	243,800,817	235,020,160	8,780,657	52,169,254
1993	156,154,000	153,885,280	2,268,720	54,437,974
1994	465,211,683	450,820,868	14,390,815	68,828,789
1995	214,169,344	206,073,929	8,095,415	76,924,204
1996	217,983,637	212,996,833	4,986,804	81,911,008
1997	222,575,653	220,225,979	2,349,675	84,260,682
1998	227,918,005	227,774,513	143,492	84,404,175
1999	233,988,329	235,656,097	(1,667,768)	82,736,407
2000	239,349,998	243,884,921	(4,534,923)	78,201,484
2001	245,763,124	252,475,721	(6,712,598)	71,488,885
2002	253,150,747	261,443,786	(8,293,039)	63,195,847
2003	261,451,081	259,232,695	2,218,386	65,414,233
2004	270,615,379	269,003,446	1,611,933	67,026,166
2005	279,976,566	279,200,786	775,781	67,801,947
2006	290,356,747	289,842,340	514,407	68,316,354
2007	301,678,285	300,946,337	731,948	69,048,302
2008	313,884,619	312,531,617	1,353,001	70,401,303
2009	326,936,256	324,617,630	2,318,626	72,719,929
2010	337,506,838	337,224,436	282,402	73,002,331
2011	352,843,658	350,372,702	2,470,956	75,473,287
2012	358,848,744	364,083,690	4,765,054	80,238,341
2013	385,551,063	378,379,252	7,171,812	87,410,153
2014	402,980,610	393,281,800	9,698,810	97,108,963
2015	421,168,412	374,802,918	46,365,494	143,474,457

collected at the province level on behalf of central government, which is presently allocated primarily towards Bangkok (60%), with the remainder to all cities and all other regional districts (40%).

The proposed approach, a variation of which is already in use in Europe, would be to allow municipalities to make use of VAT funds on a "revolving and temporary basis". Municipalities would receive the earnings from investment of the VAT attributable to their area for a short period of time (say, 18-25 days). No major changes would be required in collection and distribution of funds, and there would be no major cash flow impact affecting governments' revenues. This approach could provide a major funding source to cities, which could be used to support an increase in their debt servicing capacity. While following the prevailing nationwide VAT allocation, it would substantially offset what is perceived as a serious inequity.

CREATION OF THE NEW INFRASTRUCTURE GUARANTY FACILITY
DESCRIPTION OF THE STRUCTURE AND OPERATIONS

A. SETTING UP A CORPORATE STRUCTURE

1. Recommended Structure

A jointly-owned public private corporation is recommended for the new infrastructure Guaranty Facility. The objective of having public-private ownership is to promote private sector oriented management practices, and to involve skilled private sector financial professionals. All persons consulted in both the public and private sectors agreed that private sector management would be preferable to a purely government-owned guaranty facility. They believed that private management would be more efficient, less subject to political influence and encourage loan repayment by the municipalities. A government facility would be subject to government civil service regulations including salary scales which would make attracting experienced, competent managers difficult. The manager of the new facility should be an experienced banker, hired with private sector competitive salary. Only a small staff will be required.

2. Other Options

Several options for placing the guaranty facility in existing financial institutions were considered. The criteria for consideration included relevant expertise of the organization to operate an infrastructure credit facility, ease of establishment, confidence of lenders in the ability of the organization to manage the guaranty facility, legal authority to operate the facility, level of potential political influence on operations, and acceptability by government and the private sector. Among the options reviewed were using the Small Industry Credit Guarantee Corporation (SICGC) which provides loan guaranties for small industries, the Industrial Finance Corporation of Thailand (IFCT) which provides project finance to corporations.

Neither of these institutions is an appropriate vehicle from the standpoint of the type of projects to be financed. The only guaranty organization in Thailand, SICGC, is charged with guarantying credits for small industries. Having the SICGC manage the facility is not recommended based on the lack of relevant expertise in evaluating large infrastructure projects or other project loans to public sector entities, and its small size. Little relationship exists between the activities of SICGC and the new Guaranty Facility for environmental projects. This lack of business synergy in itself is sufficient reason not to involve the SICGC. The SICGC is recently established as an statutory corporation (in 1990), having been previously managed by the IFCT. It has always had a low level of activity and apparently only recently has streamlined its procedures and adjusted criteria to be more responsive to the needs of small industries and lenders. Its capital at B400 million is small relative to the potential capital required to support the Guaranty Facility for environmental projects. The SICGC has joint public-private ownership, with private Thai commercial banks, Krung Thai Bank, IFCT and the Ministry of

63

Finance (MOF) as shareholders. While not suitable to manage an infrastructure credit guaranty facility, the SICGC shareholding structure provides a useful model for consideration when establishing the new facility. Likewise, the statute establishing the SICGC illustrates what areas should be addressed in establishing a new Facility.

The same institutions were looked at as interim solutions in order facilitate the start up of loan operations. The IFCT offers the best possibility for an interim management solution until such time as a corporation is established. Its project finance activities directed towards Thai private sector businesses have similarities with the skills required to evaluate financing of environmental infrastructure projects and the ability of prospective borrowers to service debt. Likewise, IFCT has mixed public/private sector ownership. IFCT managed the small industry credit guarantee facility prior to its establishment as a statutory corporation. Apparently the IFCT lacks the legal authority to become involved in the financing of infrastructure, but it still has to be confirmed that it could manage a guaranty facility on behalf of the RTG or public/private shareholders.

It might also be possible for a single bank to manage the guaranty program prior to approval of the guaranty corporation. This, however, is a risky option since it raises the prospect of conflict of interest between lending and guarantying. Were the bank not really to be an active competitor, e.g., the Government Savings Bank and the Government Housing Bank, this conflict situation would not be likely to arise, as these institutions are not really viewed as competitors. However, both are government institutions, which might be viewed by municipalities as not requiring the same concern with repayment as would be the case of a joint public-private organization. Neither of these financial institutions has relevant BOT or municipal project expertise to bring to interim management of the infrastructure credit guaranty.

Some of the recommendations for the organization of the new corporation are as follows:

- | | |
|---------------------------------|--|
| Board of Directors | Voting members would be representatives of the financial institution shareholders (banks, financial coporations) and the MOF. Ex-officio, non-voting members would include one representative from municipalities (perhaps the President of the Municipal League), one private developer (BOT), a representative from MOSTE, and one from MOI. |
| Shareholders¹ | Government would hold less than 50% of total equity and total membership on the Board of Directors. Some commercial banks are public, e.g., Government Savings Bank, so their equity would be counted |

¹ The larger commercial banks and the Government Savings Bank are potentially the largest shareholders. Participation will be sought from at least seven financial institutions, primarily the banks that are likely to lend to BOT operators and municipalities for environmental infrastucture projects.

66

with the MOF's as public. Private sector equity and board members could come from both local and foreign banks, finance companies (merchant/investment banking subsidiaries), IFCT, and others such as insurance companies

Regulator **Oversight and regulation would be the responsibility of the MOF**

3. **Legal Considerations**

A private sector corporation to offer infrastructure credit guaranties could easily be established under corporation law. Government cannot invest in the private corporation without specific Cabinet/Parliamentary approval. Having a mixed public/private corporation will require specific approval, initially from the Cabinet. It will most likely also require Parliamentary approval through passing a law establishing a statutory corporation to offer municipal credit guaranties. Parliamentary approval is expected to take as long as two years, compared to less than six months for Cabinet approval. However, operations can begin immediately upon Cabinet approval.

The MOF is explicitly granted the power to guaranty other government agencies including municipalities in the 1967 Act Determining the Power of the Ministry of Finance in Guarantying (as amended). It can guarantee an obligation of a financial institution with the approval of cabinet and the obligations of state enterprises. The guaranty is limited for financial institutions to four times the investment capital of the financial institution. The MOF can determine the guaranty fee for a state enterprise and a financial institution at one percent of the guaranteed amount.

Banks have the legal authority to guarantee and to invest in public-private financial institutions.

The sole government entity that can own stock on behalf of the RTG is the MOF. Therefore, the government share of the municipal credit guaranty corporation would be held by the MOF. Other governmental entities could be on the Board of Directors, either as board members or as ex-officio (advisory) members.

While the Bank of Thailand (BOT) is the regulatory authority for commercial banks, the MOF regulates the SICGC. The BOT believes that MOF supervision of the municipal guaranty corporation would be appropriate, but the BOT would be willing to serve on the Board in an advisory capacity. The Bank of Thailand (BOT) cannot hold government shares directly unless directed by statute. Since the BOT has no guaranty role and is does not directly deal with municipalities, it views its role as advisory rather than direct.

67

A change in the way transfers are made from central government to the municipalities would require a cabinet decree. For example, Cabinet would have to authorize use of specific funds for debt service that are now transferred as grants.

The new corporation should be exempt from taxation on income from fees and investments. Taxation would serve to lower the amount of funds available for reserves to support the guarantee. If it is not tax exempt, consideration could be given to having municipal fees be considered participation in a separate class of stock, and the stock and investment earnings from that class of stock be on first call in the event the municipality defaulted.

B. OPERATIONAL GUIDELINES

1. Guaranties

Guaranties supporting commercial or institutional credits to municipalities and public utility districts or BOO/BOT operators would initially be issued up to five times the pool of funds, including equity. This could eventually be increased to as much as eight times based on favorable guaranty claims experience.

It is anticipated that \$400-\$600 million in guarantees will be issued the first two years. The municipalities benefiting from the guaranties will be required either to pay a two per cent guaranty fee, computed on the annual guaranty exposure of that municipality, or to buy share certificates in lieu of paying a two per cent guaranty fee. BOO/BOT operators would pay the 2% guarantee fee, annually on outstanding balance.

For BOO/BOT operators the maximum loan eligible for guaranty would be 85% of project costs, with the remainder representing the operators equity in the project.

Municipalities might provide collateral from reserves or current revenue equal to a portion of the loan amount which would substitute for providing equity.

Guaranties would cover 100% of loan amount.

Steps in the Guaranty Process

- Bank reviews application for loans from BOT or municipality
- Bank structures loan and applies to the Infrastructure Guaranty Corporation for a guaranty to cover the loan
- The Guaranty Corporation underwrites the guaranty application, and if approved, a guaranty is issued. The borrower pays two percent guaranty fee, prior to disbursement.

68

- Lender makes loan disbursements on basis of project implementation needs.
- Borrower pays loan (municipality from its own resources and BOT operator from project fees).
- Lender reports monthly to the Guaranty Corporation on disbursements, amounts outstanding and any past due payments.
- Lender is obliged to monitor loan and request past due payment from the municipality or BOT operator.
- If loan principal and/or interest is overdue six months, the lender can make claim against the guaranty. The claim will be reviewed by the Guaranty Corporation.
- The Corporation is responsible for pursuing recoveries from borrowers. The lender works with the corporation to effect recoveries.
- Payment of claim would be made 6 months after default on defaulted installment.
- Claims against guaranties will be paid in the following order:
 1. From participating shares to municipalities
 2. From interest earnings generated by the investment of the shareholder's contribution
 3. From shareholder's equity (capital plus retained earnings)

C. START-UP - RESOURCES AND SCHEDULE

Commercial banks (at least 7) will be invited to set up a corporation majority-owned by financial institutions that operate on a commercial basis for the purpose of creating a guaranty corporation. Initial capitalization could be modest, perhaps \$20 million, with provisions made for subsequent increases as required. Eventually, private sector capitalization of \$50 million or more will be sought.

Upon establishment of the Guaranty Facility, the RTG (through the Ministry of Finance) will domicile an initial sum of B625 million, representing the Baht equivalent of a RTG borrowing of \$25 million under the HG, to be increased over a five-year period, up to a maximum of \$100 million. The funds from the RTG may be provided both as equity and as capital for guaranties for use by the corporation.

The managers of the facility will invest the equity and other capital in government securities and/or secure investments including short term interest-bearing placements with creditworthy financial institutions in Thailand.

69

Est. Date	ACTION
08/93	MOF agrees in principle to support the establishment of a new Guaranty Facility for environmental infrastructure
10/93	Business plan and "feasibility study" completed, with USAID assistance and RTG working group.
12/93	Proposal presented to Cabinet
01/94	"Prospectus" based on the feasibility study proposed to potential private sector shareholders
03/94	Commitments to become shareholders and purchase shares obtained
05/94	Operations begin under interim management structure, managed by IFCT or another organization for a fee.
06/94	MOF transfers resources to fund, earnings from which are used for establishment expenses, administrative cost and build-up of guarantee reserves. HG resources are borrowed, if the RTG decides it is appropriate. Simultaneously, proposal submitted to Parliament for incorporation.
07/94	First loans are made.

70

ANNEX C.4

ILLUSTRATIVE PROJECTS FOR LOAN FINANCING

This analysis lists the types of projects which are expected to be eligible for guaranties, and some examples of projects which might be initiated by cities (Section B) and by the private sector (Section C).

A. TYPE OF PROJECTS ELIGIBLE FOR HG LOAN REIMBURSEMENT

1. Solid Waste Projects

- Solid waste collection: vehicles of various types (small, large, compactor), dumpsters, transfer trucks, cleaning equipment.
- Resource recovery systems: sorting, separation and/or spreading, composting, methane gas production, high temperature reduction and energy production.
- Refuse disposal: land fill construction, drainage control and equipment (trucks, tractors, cranes, barges), waste storage, clean up and closing of land fills.

2. Potable Water Project

- Wells and other source development
- Aquaducts and distribution mains
- Local area water distribution systems, including hydrants, stanpipes, and related equipment
- Water chlorination, fluoridation, and purification
- Industrial wells and storage facilities.

3. Storm Drainage Projects

- Street drains, tunnels, lined canals.
- Impoundment areas for flood damage reduction.
- Grates, settling basins and other pollution removal devices.
- Sewer basin cleaning equipment.
- Dikes, walls and other storm and surge protection devices.
- Weytlands protection and construction
- Klong dredging and cleaning.

70

4. Municipal Waste Water Projects

- Installation, expansion, rehabilitation and upgrading of waste water collection networks and sewers, including television condition monitoring systems and pipe relining.
- Treatment systems, including primary and secondary treatment plants and equipment, settling basins, chlorination, package plants, lagoons, mechanical areators.

5. Toilet Waste Projects

- Collection
- Treatment and disposal
- Sludge separation and composting
- Installation of dry (composting) toilets.

6. Other Projects

- Preventive health facilities and equipment.
- Air and water quality monitoring equipment.
- Metering, measuring and signaling systems in connection with infrastructure systems, computerized command and control systems for monitoring conditions and changes.
- Tracking, billing and fee collection systems in connection with utility and tax rates or user charges.
- Slaughterhouse and/or stockyard waste treatment or reuse (biogas generation) systems.

Note: Industrial environmental projects may also be funded by the facility at some future time.

B. ENVIRONMENTAL INFRASTRUCTURE PROJECTS IDENTIFIED BY CITY OFFICIALS AS POTENTIAL PROJECTS FOR LOAN FINANCING

NONTHABURI MUNICIPALITY

The following capital investment projects are included in the municipality's current three year capital budget plan:

1. Development of a new sanitary landfill site to replace the existing distant one (35 km. away) which has little remaining capacity. A new landfill site is estimated by city officials to cost about 52 Million Baht for the land alone. The city also needs

72

more and better condition reuse collection vehicles. The total capital requirements for the next three years for the sanitation department amounts to some 166.2 Million Baht or \$6.64 Million, split equally between local and foreign costs. The four projects included in the capital budget are listed below. The purchase of 57 vehicles, mostly trucks for various purposes, is included in the capital budget. (Details of these project costs are shown in the Nonthaburi Capital Budget at the end of this paper).

2. Solid waste disposal (new landfill).
3. Solid waste collection.
4. Septic tank sludge collection and disposal.
5. A new 17 Million Baht municipal slaughterhouse.

The following additional projects are those of greatest current interest to Nonthaburi's city officials, based on interviews with them:

o Wast water treatment collectors and plants, now wholly absent, have been proposed by the national public works engineers. They would serve 80 percent of the city. Preliminary cost estimates are about \$60 million (1.5 Billion Baht). Two "gray water" treatment plants would be built. Detailed cost estimates are being prepared by the Public Works Department (PWD).

o Storm drainage improvements are urgently needed, although the precise nature of actions proposed was not specified. Nonthaburi, like Bangkok, is a very low-lying city located in a tidal river basin. The city receives a meter and a half of rainfall each year, concentrated into two-thirds of the year. In addition, its location at the mouth of the Chao Phraya river subjects it to possible water surges or high tides. Structures in downtown Nonthaburi, which abuts directly on the river, are highly exposed to floods.

SAMUT PRAKAN MUNICIPALITY

Samut Prakan is one of nine cities to implement an experimental land valuing system and to levy the full 6 percent (of land value) land tax allowed by law. The results was a 77 percent increase in revenues in the first year of introducing the new valuation system. City officials listed the following four priorities for infrastructure investments:

1. A new landfill site for which they need 150 rai of land. This is a very large quantity to be found in a rapidly growing urban area. Sites may cost a million Baht per rai.

73

2. Equipment for the solid waste collection unit, including more efficient compactor trucks (they now use five people on each of their 17 obsolete trucks) and tractors for the landfill. Total estimated cost: \$8 million (200 Million Baht).

3. Widening of local roads to ease the problem of refuse collection. (Clearly, HG resources would not be used to finance such projects, but it may be possible to demonstrate alternative feasible solutions through the capital budgeting, revenue enhancement, project feasibility and financing assistance provided to participating municipalities.)

4. Dikes to keep the river from flooding into the low-lying city and other drainage works to help prevent rainfall-based flooding as well. User fees will be collected for this project which will be handled through a special assessment district.

NAKHON RATCHASIMA MUNICIPALITY

Nakhon Ratchasima has a clear set of infrastructure priorities. In rank order, they are:

1. Additional interceptor sewers and oxygenation basins to cover the remaining 30 square kilometers of the city (28 percent or 7 square km. are already served). They do not have any cost estimate for this project as yet, although the broad outlines of what is needed were laid out by the PWD engineers when they designed the first stage. The first stage cost \$1.2 million (30 Million Baht) for the plant alone, not including the interception sewers. The remainder of the system will clearly cost more, perhaps on the order of \$6-8 million (150 to 200 Million Baht).

2. A site for a new solid waste landfill. At present, the city is collecting 180 tons of refuse per day and is disposing of it in a landfill owned by another government entity. Nakhon Ratchasima does not anticipate being able to continue to use this leased landfill for more than another 12 years (when the lease expires). Nakhon Ratchasima's staff estimates that they need 100 rai for a new landfill and that land acquisition will cost about 200,000 Baht per rai. For both land and equipment, they believe they need \$1-1.2 million (25 to 30 Million Baht) for the new landfill.

3. Nakhon Ratchasima's solid waste system also needs more equipment, including 27 front-end loaders for the existing landfill and replacements for their aging collection truck fleet. They especially mentioned the need for small trucks to get into a narrow streets of the old center of the city.

4. An additional water supply main or canal is needed to allow access to a second government reservoir because the reservoir Korat

74

now depends on its reaching capacity. A new aquaduct could cost up to \$8 million (200 Million Baht). Another avenue Nakhon Ratchasima is exploring is recycling water from the oxygenation tanks of its water pollution control system for non-drinking purposes.

5. A new slaughterhouse is needed to replace the obsolete, polluted existing facility. Nakhon Ratchasima has already purchased the site for a new slaughterhouse but they need money to erect a structure and purchase pollution control equipment. They estimate a cost of about \$800,000 (20 Million Baht). Chances should be good for the debt service on this facility to be covered by fees from the users.

BANGKOK METROPOLITAN ADMINISTRATION

Bangkok Metropolitan Administration (BMA) has begun an ambitious program of environmental infrastructure investment. Two projects have been identified as being both of high priority and suitable for loan financing:

1. BMA owns a number of valuable tracts of land which could be developed within the framework of a public/private partnership. In exchange for all or part of the development rights and other incentives such as access to HG-backed guarantees and loans, the private investor partner could be required to build public facilities and/or infrastructure on a BOO or BOT basis. This approach has been used in a number of communities in the U.S. and provides an ideal opportunity for U.S.-Thai partnerships.

2. BMA has initiated a major wastewater treatment program (covering toilet wastes as well as "gray water" and storm water). The system is to be constructed in phases. The first four projects which constitute phase one (see below) will serve only 2 million of Bangkok's 5-7 million inhabitants and are expected to require about 12.5 Billion Baht (\$500 million) of investment. The RTG has agreed to provide 75 percent of the required funds for construction of the first phase, but BMA must repay these funds and must also find a way to finance the remaining cost. Financing for future projects is expected to be on a less generous basis.

Phase One Bangkok Waste Water Treatment Project:

- o Sukhumvit - 30,000 cubic meters per day secondary treatment serving 100,000 people at an estimated cost of 280 Million Baht (\$11.2 million)
- o Lat Phrao - 40,000 cubic meters per day gray water treatment serving 125,000 people at an estimated cost of 700 Million Baht (\$27 million).

15

- o Thonburi - 350,000 cubic meters per day serving 1,080,000 people and other users at an estimated cost 6 Billion Baht (\$240 million).
- o Chaeng Wathana - 390,000 cubic meters per day serving 750,000 people and other users at an estimated cost of 5.5 Billion Baht (220 million).

Contracts for three of the four projects in the First Phase have already been let, but the Fourth (and largest) Project is still in the design stage. There will be many others to follow before the entire urban area is served.

Environmental Infrastructure Project in Nonthaburi's Capital Budget

1. Solid Waste Disposal (New Landfill)

LOCAL COSTS	(000 Baht)	(US\$)
- Access Road	14,316	573,000
- Excavation	457	18,280
- Drainage	6,394	255,760
- Security Wall	12,640	505,000
- Aerators and Pond	<u>7,000</u>	<u>280,000</u>
TOTAL LOCAL COSTS	40,807	1,632,000
FOREIGN COSTS		
- Transformer	500	20,000
- 4 Garbage Trucks	6,400	256,000
- 2 Ten Wheeler Trucks	3,200	128,000
- 2 3,000 Lit. & 1 1,000 Lit.	<u>1,900</u>	<u>76,000</u>
TOTAL FOREIGN COSTS	<u>12,000</u>	<u>480,000</u>
TOTAL PROJECT COSTS	52,807	2,112,000

2. Solid Waste Collection Facilities and Equipment

LOCAL COSTS	(000 Baht)	(US \$)
- Paving Area (New Land)	5,000	200,000
- Worker Housing	<u>500</u>	<u>20,000</u>
TOTAL LOCAL COSTS	5,500	200,000

16

FOREIGN COSTS

- 20 Garbage Trucks	36,000	1,440,000
- 10 Ten Wheeler Trucks	8,000	320,000
- 15 Trucks	<u>27,000</u>	<u>1,080,000</u>
TOTAL FOREIGN COST	<u>71,000</u>	<u>2,840,000</u>
TOTAL PROJECT COSTS	75,500	3,060,000

3. Septic Tank Waste Disposal**LOCAL COSTS**

- Land and Construction (5 Rai for Night Soil Pits)	17,850	714,000
--	--------	---------

FOREIGN COSTS

- 4 Pump Trucks	<u>3,600</u>	<u>144,000</u>
TOTAL PROJECT COSTS	21,450	858,000

4. Slaughterhouse

TOTAL COSTS (ALL LOCAL)	19,000	760,000
----------------------------	--------	---------

TOTAL CAPITAL BUDGET

LOCAL COSTS	83,157	3,326,280
FOREIGN COSTS	<u>83,000</u>	<u>3,320,000</u>
TOTAL CAPITAL BUDGET COSTS	166,157	6,646,280

C. A PRIVATE WATER AUTHORITY FOR PHUKETThe Problem

Phuket, a tourist island of 180,000 with over a million visitors a year is embarking on an environmental "action program" to deal with water, waste water and solid waste problems. Water supply is a serious problem as the island water authority can only provide 11,000 cubic meters of water a day, as opposed to a water demand of 23,000 cubic meters. The shortfall is made up by private operators that buy rainwater from tin mine pits and truck the water to the hotels. This operation is costly and time consuming for the hotels. Due to dry season-wet season, inadequate groundwater and the projected continued growth on Phuket, water supply is an increasingly severe problem.

11

A Solution

Recently, a U.S. Asian Environmental Partnership EPA "action team" visited Phuket to survey the Island's environmental problems and propose solutions. The EPA has compiled a list of "Quick Winners," actions that are short run and inexpensive that can deal effectively with some of the islands problems such as waste water. Others are more medium term, such as their suggestion for dealing with the current water problem.

The EPA team has proposed that Phuket develop a private Phuket Water Authority that would seek to develop a reservoir in nearby Phanga Province, then pipe and distribute the water throughout Phuket. During the EPA visit and in meetings with the Phuket Hotel Association, the hotel owners and operators indicated they would consider signing with such a water authority. This would relive

the hotels of the need to constantly deal with the private truckers as well as purify the water they receive from the tin mines.

The EPA team recommended that USAID seek U.S. technical assistance for such a venture from the U.S. private sector, especially from an organization in the U.S. that might be interested in investing and jointly operating the system with Phuket as a partner. Ideally, the tin mine owners could be linked into the system, as well as the private truckers, who would, of course, lose out in a fully automated piped system.

The Governor of Phuket has expressed interest in the privatization of the water system. The Governor noted that as Phuket is designated as a "special province", he has the authority to privatize the water system.

USAID has agreed to follow up with the EPA team and fund the travel and per diem costs of a technical assistance team, preferably a private U.S. water authority operator.

AEP-HG Financing

If the technical assistance teams finds the creation of a Phuket Water Authority viable and the Governor follows through on his authority to privatize the water system, equity and debt financing could be arranged through a variety of means. The hotels, for example, may want to invest in the authority. The U.S. partner may also want to invest.

Debt financing can be arranged through the new AEP-Housing Guarantee facility with the SIFCT, Small Industrial Finance Corporation of Thailand. Under this new program, the AEP-HG will

18

guarantee loans for private municipal environmental services. Accordingly, a loan could be arranged from a local Thai bank (Krung Thai, Siam Commercial, Thai Farmers, etc.), which then would be guaranteed by the SIFCT.

USAID and AEP could enhance this project by assisting with training, billing and collection systems, and start-up technical assistance.

79

INSTITUTIONAL ROLES AND RESPONSIBILITIES

A. RTG POLICY AND REGULATORY AGENCIES

1. Ministry of Finance (MOF)

The MOF is ultimately responsible for all decisions related to RTG foreign currency borrowing and domestic fiscal policy. It is also the sole government entity that can hold shares directly on behalf of government. The MOF has the authority to commit the government to financial guaranties under the Act Determining the Power of the Ministry of Finance. Therefore, the MOF will play a lead role not only as borrower of HG funds on behalf of the Government, but also in the establishment of the Guaranty Facility. The MOF's involvement in the creation of a similar guaranty facility (SICGC) is described in Annex C.1.

2. The Industrial Finance Corporation of Thailand (IFCT)

The Industrial Finance Corporation of Thailand (IFCT) is likely to play a management role in the new Project, and could also be involved in policy issues. It is a development finance institution established in 1959 under the Industrial Finance Corporation of Thailand Act. Its main objectives are to promote the development of private industrial enterprises and the domestic capital market. It is managed as a private organization, and its financial services for projects are consistent with the Government's development policies. Its services include: medium and long term loans, working capital loans, equity investments, loan syndications, guarantees, and investment advisory services. IFCT also manages special funds set up by the Government, such as the Industrial Development Fund, the Capital Market Development Fund, and the Small Industry Credit Guaranty Fund. IFCT's shareholding structure is approximately as follows:

commercial banks, foreign and Thai	30%
private companies, finance, and insurance	29%
Ministry of Finance	17%
Krung Thai Bank	8%
the remainder with private individuals	

It affiliated companies include: The Mutual Fund Co., Ltd., The Thai Factory Development Co., Ltd., The Industrial Management Co. Ltd., The Thai Orient Leasing Co. Ltd., and the Bara Development Finance and Securities Co., Ltd.

3. Ministry of Science, Technology, and Environment (MOSTE)

MOSTE is responsible for formulating RTG environmental protection policies and funding selected environmental infrastructure projects. It has been playing a leading role in ensuring that other RTG agencies adopt and follow appropriate environmental standards. The Environmental Act of 1992 provides MOSTE with widespread authority in a number of environmental areas.

The National Environmental Board (NEB): The NEB has been subsumed into MOSTE. This agency now 1) submits policies, plans, and opinions on the development of the environment to the Cabinet; 2) recommends amendments and improvements to the law concerning the prevention of environmental degradation; 3) considers and submits opinions about projects which may have adverse effects on environmental quality to the Cabinet; 4) recommends standards of environmental quality and will soon have the mandate to enforce such standards; and 5) provides loan and grant funding for environmental infrastructure projects.

MOSTE issues specific regulations for Environmental Impact Assessments (EIAs). EIAs are required for hotel or resort facilities in environmentally sensitive areas with more than 80 rooms, for industrial estates of all sizes, for thermal power plants, and several types of industrial installations. Environmental Analyses (much briefer and streamlined than EIAs) will be conducted for all environmental projects financed through the Guaranty Facility. Only in cases where indicated will EIAs be required. EIAs must be submitted to the MOSTE which has the power to approve or reject EIA reports but not to suspend or revoke factory licenses. Only registered institutions and experts are permitted to prepare EIAs; in 1990, there were 22 companies, 7 universities and 1 research institute. However, the effectiveness of MOSTE in enforcing environmental controls on the basis of EIAs is undermined by lack of resources, weak support from top Government levels and procedural privileges enjoyed by the Board of Investment and the Industrial Estate Authority of Thailand.

The MOSTE Environmental Fund was launched in March 1992, although no projects have been funded, as yet. Initial capital includes \$20 million from the RTG budget and \$200 million from the Oil Fund. Fifty percent of the Fund is earmarked for industrial pollution control and 50% for municipal waste management. The Fund will be used in support of the RTG's budget in solving politically sensitive environmental problems such as wastewater, solid waste, air pollution, and natural resource management.

The Environmental Fund will disburse some resources in the form of grants and some as loans. The terms of loans have not been established. The range of five to six percent has been mentioned, as well as four percent per quarter (which would be a market rate). The manager of the Fund has not yet been announced. When the conditions of the resources are determined, and the Fund is operational, it is likely that the funds will be distributed quickly. Most of the funds have already been earmarked for projects according to various government spokesmen. OECF has indicated support for additional projects in the future, with funding levels up to \$100 million a year.

The MOSTE Director of the Fund sees its operation as complimentary to the Guaranty Facility. Given the Fund's resource limitations and the high political profile of its projects, e.g., hazardous waste dumps, important tourist locations, its resources probably will be made on soft terms more often than not. This is not, however, seen as competition with the Guaranty Facility given the vast needs for investment in Thai cities and industry. If cities receiving Environmental Fund resources have need for additional loans, and are credit worthy, they would be able to carry out a greater number of projects.

The information gather in the course of the development of the Guaranty Facility will be shared with MOSTE and with other RTG institutions involved in municipal finance. As these various financing mechanisms become operational, coordination will be continued.

4. Ministry of Interior (MOI)

The MOI is critical to the Project insofar as loans are made to municipalities. Few municipalities have the resources or, training to "go it alone." though, they have more authority and capability than they use. Within the MOI, several offices may be involved:

- o **Office of Policy and Planning (OPP):** This office is responsible for preparation of policies and plans on activities under the responsibility of the Ministry and coordinates with other agencies at the national level.
- o **Public Works Department (PWD):** This is generally the lead technical agency for the MoInt in the development of water supply, sanitation, and other engineering works outside of Bangkok. PWD is especially important in the development of wastewater treatment capabilities for municipalities and other local governments.
- o **Department of Local Administration (DOLA):** DOLA is responsible for all activities at the provincial and local levels. Under this department, there are three divisions concerned with developmental affairs: 1) **The Local Finance Division (LFD)** - The LFD reviews municipal and provincial government budgets and sets policy in all local financial matters. This Division will play a key role in effecting policy changes related to RTG transfers to municipalities; 2) **The Office of Urban Development (OUD)** - Coordinates external assistance for the Ministry. The OUD was created by the World Bank to be solely responsible for the implementation of the RCDP I and II. It is expected that, by the end of 1993, the OUD's role will be expanded to include policy formulation and review and approval of all local government administrations' development plans; 3) **The Local Affairs Division (LAD)** - Oversees all civil activities of the local government, except the City of Pattaya and the BMA which are under the direct responsibility of the Minister of Interior. The LAD also coordinates plans and programs of the Municipal League of Thailand; and 4) **The Institute of Government Administration and Local Development (IGALD):** Plans and implements training programs for provincial and local officials.

82'

5. Office of the National Economic and Social Development Board (NESDB): This is the national agency which serves as an advisory body to the Prime Minister. Its responsibilities include the development of policies and preparation of the five-year development plan at the national level. NESDB is receptive to technical analyses and the Thailand Development Research Institute (TDRI) is often an effective avenue for approaching NESDB.

NESDB has been helpful in coordinating other RTG line agencies in the preparation of the HG Project. If Cabinet approval is required for the creation of the Guaranty Facility, the NESDB will advocate its approval. The Cabinet would request NESDB's analysis and recommendation of the HG Project.

6. The Department of Technical and Economic Cooperation (DTEC): DTEC coordinates all foreign grant assistance to Thailand. Proposals for both RTG and foreign donor agency initiated projects are channelled through DTEC for review and approval. DTEC will need to be consulted frequently during the UIGF's implementation so that the effectiveness of USAID grant assistance, and possibly other donor funding, can be maximized to the greatest extent possible.

7. Ministry of Industry (MOInd)

This Ministry could be involved in BOO/BOT Projects financed by a Guaranty Facility. It is responsible for promotion of industrial development and control of industrial pollution. It is also charged with the provision of water supply from groundwater and control of groundwater subtraction in some areas. The MOInd is the only agency outside of MOSTE currently to have environmental enforcement authority. Agencies involved with environmental infrastructure are:

- o **Department of Industrial Works (DIW):** Regulates utilities and services for most major industries. Currently contracts out for private treatment and disposal of hazardous wastes.
- o **Industrial Estate Authority of Thailand (IEAT):** As a state enterprise, provides necessary services within the boundaries of its industrial estates.

B. BANKS AND FINANCIAL INSTITUTIONS

Sixteen Thai commercial banks operate in Thailand, in addition, the Government Savings Bank undertakes many commercial banking activities. The largest being Bangkok Bank Ltd.

The commercial banks do not lend to municipalities, except for the Bangkok Metropolitan Administration (BMA) on large high profile projects which involve participation of consortia of prominent companies. Commercial banks and finance companies finance projects for private sector clients. The primary lending activity is short term, consistent with the predominantly short term nature of their funding. Project lending is viewed as lucrative in that transactions tend to be larger and involve fees as well as interest income from loans. However, financing

projects is also considered higher risk than typical lending to companies. When financing projects, heavy reliance is placed on the generation of sufficient revenues from the project itself to make interest payments on the project loan. Various techniques are used to reduce the risk that the loan will not be paid. Often the land, plant and equipment associated with the project, are pledged as collateral security for the loan. Few projects are financed in the same manner, the particular circumstances of each are taken into account in structuring the project finance package (referred as financial engineering).

Banks have adequate liquidity and are seeking opportunities to lend and to obtain fee income. They would be interested in financing BOO/BOT operators, because the projects are based on business principles, have identifiable sources of repayment, private companies contribute their own resources and can provide collateral. They would also look more favorably on projects in Bangkok based on size, and greater knowledge and ability to monitor projects.

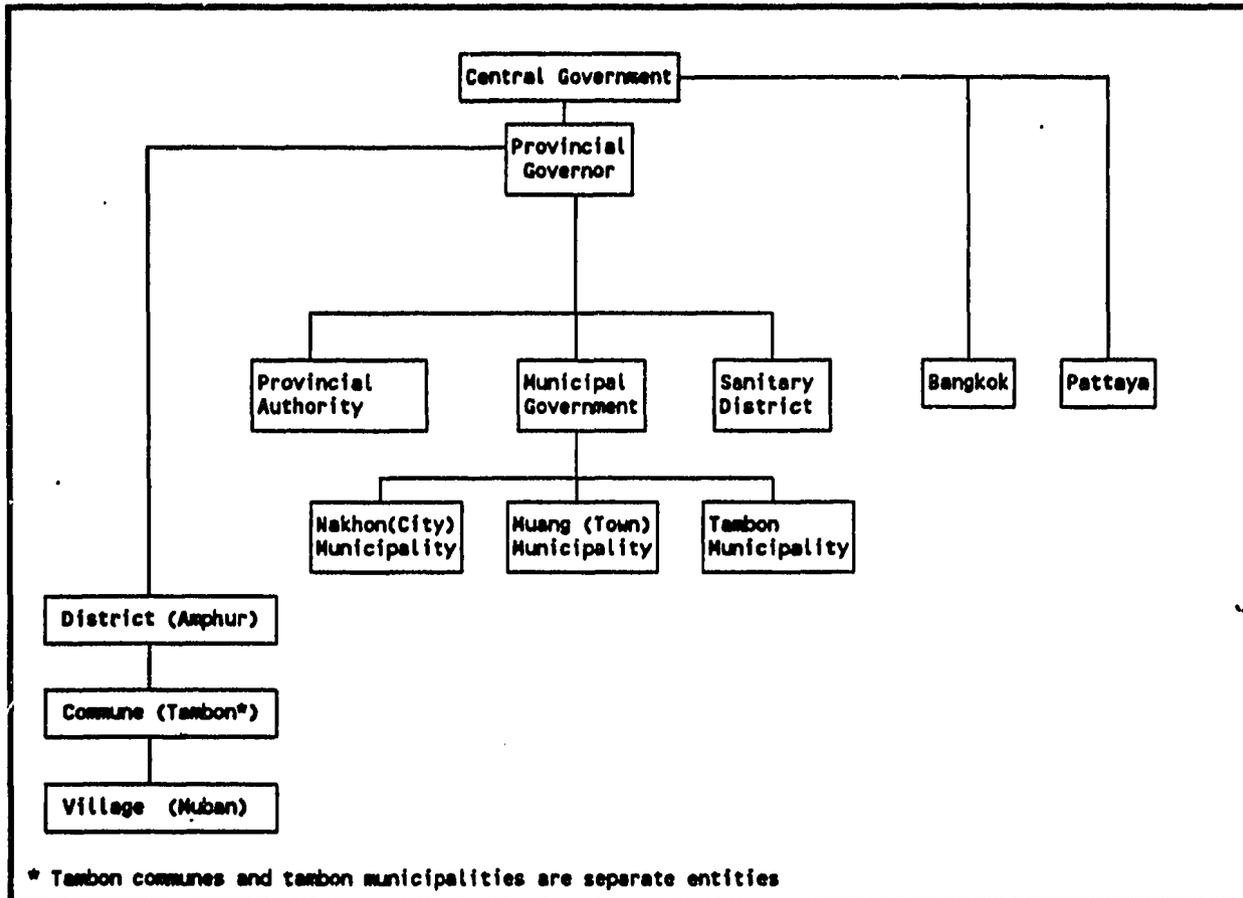
Bankers would prefer 100% guaranty of principal and interest, rather than risk sharing with the guaranty corporation. While they might be convinced to assume some risk, it would probably not exceed 10-15% (i.e. 85-90% guarantee). Some risk assumption might encourage banks to monitor the loans more closely than they would if the guaranty was 100%. With a 100% guarantee, banks would be likely to lend at the prime or super prime rate, rather than refer to the underlying credit to determine the interest rate charged.

Other financial institutions could participate in the Project, as lenders or shareholders in the Guaranty Facility. The institutions include finance companies, insurance companies, and specialized financial institutions, such as IFCT.

C. LOCAL ADMINISTRATION AND THE PROVISION OF ENVIRONMENTAL INFRASTRUCTURE

Thailand has two types of local government: entities under the direct control of the provincial governor and entities with self-governing powers. Those under the authority of of governors include districts (amphur), communes (tambon), and villages (muban). Self-governing entities include municipal governments (tesaban), and sanitary districts (sukapiban). Two special self-governing districts have been created in recent years: the Bangkok Metropolitan Administration (BMA) and the City of Pattaya. The sections that follow briefly describe these units of government. (See Figure 1.)

Figure 1
Structure of Thai Local Government



There are three types of self-governing municipalities (tesaban):

- a) nakhons, which require a population of 50,000 or more and a population density of at least 3,000 residents per square kilometer,
- b) muangs which require a population of 10,000 or more and a density of 3,000 residents per square kilometer and
- c) tambons which are established at the discretion of the Ministry of Interior if it believes that area needs are best met through a self-governing unit of local government.

The HG Project is principally concerned with the first type.

Each municipality has a legislative and executive body. The legislative body, called an assembly, consists of 12 to 24 members elected for four year terms depending on the class of municipality. The assembly is responsible for approving the municipal budget, enacting municipal ordinances and overseeing the operations of the executive branch. By custom, the leader of the majority party of the council becomes the mayor and the mayor then selects two to four councilors to help him run the municipal administration. However, by law, the appointment of the mayor and his assistants is the prerogative of the provincial governor, which serves as a powerful check on the freedom of mayors. The mayor is responsible for establishing municipal policy, presenting appropriate enabling legislation to the municipal assembly and supervising units of the executive branch. The mayor exercises his management responsibilities through the chief administrative official of the municipality, referred to as the town clerks.

Table 1 provides a breakdown of functions by type of municipality. Hiring of municipal government personnel is under the control of Municipal Service Commission. The Minister of Interior acts as the chairman of this commission, the Ministry's permanent secretary acts as vice chairman, and the director of the Ministry's Department of Local Administration acts as secretary. Commission membership includes all department heads in the Ministry. The existence of this commission has hindered recruitment and made it difficult for some local governments to hire competent professionals.

96

Table 1
Municipal Functions

Tambon	Nuang	Nakhon
<p>Compulsory Services:</p> <ol style="list-style-type: none"> 1. Maintain law and order 2. Provide/maintain roads and waterways 3. Keep roads/sidewalks & public places clean - refuse and garbage disposal 4. Prevent & suppress communicable diseases 5. Provide fire fighting services 6. Provide educational services 	<p>Compulsory Services:</p> <ol style="list-style-type: none"> 1. Maintain law and order 2. Provide/maintain roads and waterways 3. Keep roads/sidewalks & public places clean - refuse and garbage disposal 4. Prevent & suppress communicable diseases 5. Provide fire fighting services 6. Provide educational services 7. Provide clean water 8. Provide slaughter houses 9. Provide/maintain medical centers 10. Provide/maintain drainage 11. Provide/maintain public toilets 12. Provide/maintain public lights 	<p>Compulsory Services:</p> <ol style="list-style-type: none"> 1. Maintain law and order 2. Provide/maintain roads and waterways 3. Keep roads/sidewalks & public places clean - refuse and garbage disposal 4. Prevent & suppress communicable diseases 5. Provide fire fighting services 6. Provide educational services 7. Provide clean water 8. Provide slaughter houses 9. Provide/maintain medical centers 10. Provide/maintain drainage 11. Provide/maintain public toilets 12. Provide/maintain public lights 13. Provide & maintain mother & child welfare services 14. Provide other necessary public health services
<p>Optional Services:</p> <ol style="list-style-type: none"> 1. Provide market, ferry & harbor facilities 2. Provide cemeteries & crematoria 3. Promote employment 4. Engage in commercial activities <ol style="list-style-type: none"> 5. Provide clean water 6. Provide slaughter houses 7. Provide/maintain medical centers 8. Provide/maintain drainage 9. Provide/maintain public toilets 10. Provide/maintain public lighting 	<p>Optional Services:</p> <ol style="list-style-type: none"> 1. Provide market, ferry & harbor facilities 2. Provide cemeteries & crematoria 3. Promote employment 4. Engage in commercial activities 5. Provide & maintain hospitals 6. Provide other necessary public utilities 7. Provide & maintain stadia & fitness centers 8. Provide/maintain vocational schools 9. Provide & maintain parks, playgrounds & zoos 10. Provide & maintain mother & child welfare services 11. Provide & maintain other public health services 	<p>Optional Services:</p> <ol style="list-style-type: none"> 1. Provide market, ferry & harbor facilities 2. Provide cemeteries & crematoria 3. Promote employment 4. Engage in commercial activities 5. Provide & maintain hospitals 6. Provide other necessary public utilities 7. Provide & maintain stadia & fitness centers 8. Provide/maintain vocational schools 9. Provide & maintain parks, playgrounds & zoos

The executive branch must consist of at least four administrative units: a) an office of the chief administrative official, b) a division of finance, c) a division of public works and d) a division of public health. Larger towns frequently add additional administrative units.

It should be noted, also, that there are sanitary districts which are usually established in relatively high density areas that have not met the criteria for a municipality. Sanitary districts must have a population of at least 1,500 individuals or have more than 100 commercial establishments and consist of an area of one to four square kilometers. Two other factors also informally contribute to the establishment of a sanitary district: a fairly high level of urbanization and an adequate tax base. Administration of sanitary districts is carried out through a sanitary board which consists of four locally elected members, the district officer (who acts as chairman), and the deputy district officer (who acts as the chief administrative official). Other board members include the district police chief, the district health officer and the district treasurer. (Need statement about locally elected members to a sanitary board.) In theory, sanitary districts are self-governing but in practice they are run by the district officer. Functions of sanitary districts extend well beyond sanitation and are virtually identical to tambon municipalities. In addition to sanitation, district responsibilities include education, fire fighting, maintaining roads and waterways, prevention and suppression of disease, provision of market facilities, and provision of electricity.

As of 1991 there were 133 municipalities in Thailand (including Bangkok and Pattaya) as well as 849 sanitary districts. The largest municipalities (those with populations over 50,000) perform the following principal functions:

- o Formulating and adopting their own budgets, subject to technical review and approval by DOLA. DOLA refers the budgets to the Provincial governor for his review and approval as well.
- o Local roads, waterways and street lighting construction and maintenance.
- o Solid waste collection and disposal.
- o Environmental protection services, including public health functions and waste water pollution control.
- o Social services, including maternal and child welfare.
- o Fire fighting and preservation of law and order.
- o Administrative functions (such as record keeping, tax and user fee collection, etc.)
- o Economic functions such as markets, slaughterhouses and cemeteries.

88

A few municipalities operate their own water systems but for the most part water supply and distribution is the responsibility of a national parastatal agency, named the Provincial Waterworks Administration (PWA). The Bangkok area is served by its own Metropolitan Water Authority.

Local Water Supply. Three units of government are responsible for the provision of water to local governments in Thailand: the Metropolitan Waterworks Authority (MWA), the Provincial Waterworks Authority (PWA) and the municipalities themselves. The MWA is a semiautonomous agency responsible for providing water to the Bangkok Metropolitan Area and the adjacent provinces of Nonthaburi and Samutprakarn. The MWA charges an average of 5.34 baht per cubic meter of water.

The Provincial Waterworks Authority is a semiautonomous agency responsible for providing water to municipalities, sanitary districts and some rural areas. (Cabinet approval is needed for new investments over 5 million baht, setting tariffs, disposing of immovable assets and entering into partnerships with other organizations.) As of 1989 PWAs were responsible for the provision of water in 97 of Thailand's 131 municipalities (as well as 201 of the nation's 842 sanitary districts). The PWA divides its operations up into 10 subregions. In what was reportedly an effort to reduce duplication of water supply efforts the central government has mandated that municipal waterworks be integrated into the Provincial Waterworks Authority by 1990. However, political opposition made this impossible and such transfers are currently optional. Water charges range between 3.75 baht per cubic meter for monthly consumption of less than 11 cubic meters to 10 baht per cubic meter for monthly consumption over 3,000 cubic meters. The PWA also levies a monthly service charge that ranges between 10 and 100 baht depending on the diameter of the user's supply pipe.

A total of 33 municipalities provide water supply services. Usually the services are provided through the municipal engineering department in smaller communities while separate divisions of water supply are sometimes established in larger municipalities. Municipalities typically charge 2-4 baht per cubic meter of water.

Local Solid Waste Disposal. Municipal sanitation and public health services are provided by local governments with the Department of Public Health, the Public Works Department and the ONEB. At the local level sanitation responsibilities usually lie with the Division of Public Health. Most municipalities divide their public health unit into four subsections: sanitation and environmental health, veterinary services, public health services and administration. Larger municipalities may also have units devoted to solid waste removal, drainage cleaning, wastewater treatment and street sweeping.

Research suggests that urban Thais dispose of .66-.84 kilograms of waste per capita per day. This waste is usually collected by municipal employees using trucks. Some of the waste is typically diverted for recycling, with the rest being disposed of in open dumps. A very large portion of the waste is vegetable matter making a poor candidate for self-sustaining combustion.

91

The service life of sanitation equipment tends to be quite long and as a result it spends much time being serviced. This contributes to problems of uncollected garbage, limited service areas and high overhead costs. As a result only 60% to 90% of the population is provided with solid waste services in most cities. A study of waste disposal costs in Bangkok found that collection and transportation of waste cost 273 baht per ton and that disposal in an open dump cost another 54 baht per ton. (It was estimated that privatization would lead to savings of 150 baht per ton.)

Disposal at a composting site cost 570 baht per ton (and 1,850 baht per ton of compost produced). Most cities only recover 10% of their costs through user charges.

Existing Municipal Sewerage and Wastewater Management Systems. Of Thailand's 133 municipalities only five have wastewater treatment systems. (These five cities include some of the twinning candidate cities and a separate document discusses the systems.)

This absence of sewerage treatment is reflected in the quality of many of Thailand's rivers, canals and coastal waters. A study of water pollution in the lower Chao Phraya River (the river that Bangkok is located on) found that household waste accounted for 40% of the pollution in the river. Another 27% was accounted for by restaurants and food stores. Industry only accounted for 25% of the observed pollution. Collectively, hotels, hospitals, markets and other sources accounted for less than 10% of the observed pollution.

The 1980 census revealed that 95% of urban households are served by latrines or toilets connected to septic tanks and leaching pits. However, such systems are not always effective because of the high clay content of Thai soils. Furthermore, human wastes are still frequently dumped directly into the environment in low income and slum communities. Depending on the community, desludging can be the responsibility of the home owner or the municipality. The central government discourages the reuse of human waste and the waste is typically buried or composted. Sullage (grey water) from houses, commercial establishments and light industries is frequently discharged into street drains without any treatment.

ECONOMIC ANALYSIS

1. Overview

In the late 1980s Thailand had one of the fastest growing economies in the world. Although growth slowed somewhat in the 1990s it remains in excess of seven percent. This growth has led Thailand well into the ranks of the moderate income countries and been the basis of classification by A.I.D. as an "Advanced Developing Country."

Rapid economic development in the 1960s and 1970s was slowed by the worldwide recession of early 1980s. The economy recovered in the late 1980s and grew at a rate of 9-11 percent annually in the late 1980s, one of the highest rates of growth in the world. Growth has currently slowed to the 7-8 percent range.

Because of this accelerated economic activity, the Bangkok Metropolitan Area and Thailand's secondary cities face serious problems associated with rapid growth, including housing shortages and pressure on such basic services as water, sewage, and health care.

Thai Economic Data

1991 GDP (US\$b)	\$92.0
1991 GDP Per Capita	1,604.00
Avg GDP Growth 1987-91	10.4%
Agriculture as % GDP	12%
Manufacturing as % GDP	26%
1991 Inflation	5.8%
Merchandise Exports (US\$m)	\$28,407
Merchandise Imports (US\$m)	\$38,114
Debt Service Ratio	11.0%

Agriculture continues to dominate the Thai economy and small independent landholders produce substantial food surpluses. About 57 percent of Thailand's labor force works in the agricultural sector, and about 65 percent of population is dependent on it for their livelihood. Agriculture currently accounts for 12 percent of its GDP and 27 percent of its exports. Major crops included rice, maize, cassava, rubber, sugarcane, coconuts, cotton, kenaf, and tobacco.

Modern enterprises are primarily concentrated in the Bangkok Metropolitan Area. Most industries are Thai owned, but joint foreign ventures are common. State enterprises also constitute an important segment of the industrial sector. Currently industry accounts for about 26 percent of Thailand's GDP and 27 percent of its total exports. Principal manufactured products include food and beverages, textiles and apparel, and wood and mineral products.

Major exports include primary and processed agricultural products, tin, clothing, and other manufactured consumer goods. Major imports include capital goods, intermediate products, and raw materials. Petroleum products are the largest single import measured by monetary value. Largest trading partners are Japan and the United States. Trade with both is unbalanced. Thailand runs a large deficit with Japan and a large surplus with the United States.

The Thai GDP grew by 7.5 percent in 1991 and 1992. Exports have been the driving factor behind recent economic growth will export growth widely spread across different products and markets. This growth is the result of a massive wave of foreign investment in new factories and new capacity at old factories. Traditional exports such as rice, rubber, textiles computer chips, gems and frozen food and also continue to grow. As a result Thai exports topped \$32.5 billion in 1992 up from \$29 billion in 1991.

2. The HG Component

Given Thailand's ADC classification, the use of loan resources for development is extremely appropriate. HG dollar loans, made by the U.S. private sector, carry a U.S. and a Host Country Guaranty, and usually are for 30 years with a ten year grace period on interest. While the loans are at market rates, rates in the U.S. are relatively low at this time. HG loans provide untied foreign exchange. These dollars can be used by the government to restructure commercial debt, or for any other activity requiring foreign exchange. If urban infrastructure projects require foreign exchange, this can be made available directly from the HG loan as deemed appropriate by the RTG. Also, Thailand's creditworthiness, as determined by the Department of Treasury, make it an eminently suitable borrower of USG guaranteed loans.

The HG project is also economically sound in that it is supporting RTG efforts in developing sustainable financing for infrastructure. The projects will be financed with commercial bank loans. Also, Cost/benefit analyses of environmental infrastructure projects should take into account the environmental cost to society that results from the lack of basic infrastructure. While this cannot be quantified in exact terms for Thailand, it is clear from the above that Thailand as a nation is paying dearly for its lack of basic infrastructure.

Poor infrastructure could begin to hinder Thailand's extraordinary economic growth. Investors and international organizations are beginning to locate in nearby countries to avoid the congestion of Bangkok. Unsafe water at resorts negatively affects tourism. Thus, inadequate environmental infrastructure is beginning to take an economic toll, as well as a toll on the quality of life for urban residents.

The country is also paying a high price in economic terms because of the subsidies that have traditionally been built into capital investment and services. More emphasis needs to be placed on the recovery of costs for services, and on the use of loans for municipal infrastructure that support that big picture goal. Loans for pollution control and environmental infrastructure are currently more common for businesses than for cities. However, cities could and should become more business-like in their operations if they are given greater responsibility for capital investment and the means to manage more of their own finances. In particular for the 10-12 larger cities (especially Bangkok), loan financing could, over a period of time, become a much more important source of capital investment finance.

3. The Grant Component

The grant funded activities, will be financed under the Partnership Project, do not lend themselves to standard methodologies for project analysis. They will follow the strategic partnership model which require considerable leveraging of resources from partners and is aimed at identifying sustainable solutions to development problems.

Identifying and qualifying of benefits attributable to the Partnership's investments is very difficult, ex ante. However, the U.S. Thai Development Partnership PP indicates that USAID expects economic returns substantially above the opportunity cost of capital. Since many of the transactions will involve private sector investment, the likelihood of better than acceptable financial rates of return is high. And because Thailand's key prices such as foreign exchange, labor, etc, are by and large determined in open markets, economic and financial prices and rates of return may not be substantially different (leaving aside indirect costs and benefits) and both may be significantly above the opportunity cost of capital for some transactions.

ANNEX C.7

SOCIAL SOUNDNESS ANALYSIS

A. OVERVIEW OF POPULATION AND URBANIZATION TRENDS

Thailand's population is now about 57.6 million and it is growing at a rate of 1.5 percent annually. This figure represents a 50 percent reduction from the rate 20 years ago and reflects the success of Thailand's birth control program. Nonetheless, 44 percent of the populace is still under 15, and hence, population pressures are likely to continue for years to come.

Thai Demographic Data

Total Population 1992(M)	57.6
Growth Rate 1983-90	1.5%
Doubling Time	46 yrs.
Population Under 15	44.0%
Population/Sq. Km.	112.3
Urban Population	27.0%
Life Expectancy	65 yrs.
Infant Mortality/1,000	29.0
Persons/Doctor	4,473
Literacy Rate	90%

Thailand's share of urban population remains quite low, 29 percent, for a country at its stage of economic development. The urban inhabitants are concentrated in the Bangkok Metropolitan Area. The city itself has a population of 5.6 million while the population of the region is rapidly approaching 10 million. No other city in Thailand approaches Bangkok in terms of size or importance. The Bangkok metropolitan area accounts for more than 30 percent of Thailand's GDP and the city dominates Thailand in the same way Paris dominates France.

Although Thailand as a whole has been urbanizing rapidly, Bangkok and its metropolitan region remain the focus of most of the nation's urban growth. The Bangkok Metropolitan Area (BMA)¹ is one of the most extreme examples of urban primacy in the world. More than 36.2 percent of Thailand's 15.8 million urban residents live in Bangkok, far higher than any other country in the region. In 1988, the BMA had more residents than all other 132 Thai municipalities combined, (5.7 million vs. 4.2 million).

¹An entity covering 1,565 square kilometers created in 1975 and consisting of the cities Bangkok and Thonburi.

Concentration of the population has been accompanied by similar concentration of manufacturing, commercial and service enterprises in the Bangkok Metropolitan Area. The combination has exacerbated the infrastructure problems both in the BMA and the surrounding Bangkok Metropolitan Region (BMR)². Environmental degradation, traffic congestion, inadequate water supply and increased urban poverty are some of the more obvious manifestations of these problems.

At the same time, however, other cities in Thailand are becoming large enough to warrant increased investment in infrastructure. The cities of Nonthaburi, Nakhon Ratchasima, Chiang Mai, Hat Yai, Khon Kaen and a few others, in particular warrant increased levels of investment in urban infrastructure given their size.

Table 1
Population of Secondary Cities
(1990)

Nonthaburi	238,300
Nakhorn Ratchasima	194,700
Chiang Mai	160,143
Hat Yai	146,250
Khon Kaen	143,700
Nakhon Sawan	108,000
Ubon Ratchathani	103,620
Songkhla	84,200
Udon Thani	81,050

Nonthaburi was also the fastest growing large city in Thailand during the 1980s. Its population grew nearly 800 percent during the period.

B. ECONOMIC GROWTH AND INCOME DISTRIBUTION

The benefits of the country's booming economy are being felt primarily in the BMR.

Since the mid-1980s Thailand has experienced a trend of increasing regional disparities associated with the acceleration of export-led industrial growth. Rising regional disparities are reflected in the BMR's massive increases in per capita GDP. In contrast, most other areas of Thailand have experienced only modest increases in per capita GDP. Thailand's stellar economic performance has thus largely been a function of the performance of the "city state" of the Bangkok Metropolitan Region. In 1980, per capita income in the

²This area, known as the Metropolitan Region includes the Bangkok Metropolitan Area as well as the neighboring provinces of Samut Prakan, Nonthaburi, Pathum Thani, Nakhon Pathom and Samut Sakhon.

northeast was 41 percent of the national average. By 1990 it fell to 37 percent. While the case of the northeast is somewhat extreme, this figure also fell in every other region except the BMR and the East. The decline in the south has been particularly precipitous with per capita income shifting from 104 percent of the national average in 1979 to 68.5 percent in 1989. In contrast, per capita income in the BMA rose from 247 percent of the national average to 329 percent.

Despite the rapid economic growth, the incidence of poverty has hovered in the 20-30 percent range with substantial year-to-year fluctuations. This is because a large number of households are clustered immediately around the poverty line. A 1988 analysis revealed that raising the income definition of urban poverty (then set a Bht.6,320 or US\$250 annually for a family of four) increased the number living in poverty by one third. A virtually identical phenomenon was observed in the case of rural poverty even though the income figure was much lower (Bht.4,140).

The regional shifts in income are a reflection of the rapid structural changes taking place in the Thai economy. Agriculture's share of the GDP declined from 25 percent of the GDP in 1980 to approximately 16.6 percent in 1988. In contrast, industry's share of the GDP rose from 29 percent to 36 percent during this period. Nonetheless, agriculture continues to employ 57 percent of Thailand's labor force and lagging productivity in the sector helps to explain the growing disparities between the BMR and the rest of the country.

The regional distribution of GDP per capita is shown below:

Table 2
Regional Domestic Product 1989

Region	GDP 1989	Per Capita GDP 1989
Thailand	Bht.1,775,978	Bht.32,028
BMA	628,033	105,357
BMR	855,080	96,239
Central	82,003	30,587
Eastern	152,627	45,751
Western	92,183	28,434
Northern	202,926	18,833
Northeastern	229,875	11,981
Southern	161,284	21,955

Note: In Million of Baht

Source: Statistical Yearbook Thailand, 1992

Table 3
Median Urban Income
(1993)

	<u>50th %ile</u>	<u>80th %ile</u>
National Urban Median ³	Bht.14,305	Bht.50,344
Central Region Urban Median	9,809	32,817
Northern Region Urban Median	11,899	43,570
Northeastern Region Urban Median	11,816	40,006
Southern Region Urban Median	8,748	36,292
Bangkok Metropolitan Region Median	18,043	62,518

For purposes of the HG Project, an analysis of median income was carried out to determine where low income urban residents live. The data shows that the median income of households in all cities outside the Bangkok Metropolitan Region is lower than the national urban median. About 75% of the entire urban population outside BMR falls below the national urban median. Therefore, for the purposes of the HG Project, 75 percent of any city-wide urban environmental project outside Bangkok, should be "eligible" as an expenditure for HG disbursements. In the case of Bangkok, the 40th percentile (Bht.13,749 in 1993) is close to the national urban median. Therefore, 40 percent of city-wide projects in Bangkok should be an "eligible" expenditure for the purposes of HG disbursements.

In most cases outside of Bangkok, proposed systems are city-wide. In Bangkok, however, sub-projects are much more common. The manager of the Guaranty Facility will be asked to certify that projects are city-wide. When they are not, borrowers will be asked to present an estimate of urban households benefitting from the project, by income level.

C. WOMEN IN DEVELOPMENT

The situation of woman in Thailand is relatively good as demonstrated by comparative gender gross enrollment rates at all levels of education. Official data is not sex disaggregated, but numerous private studies have shown roughly equal enrollment rates, high female labor force participation and relatively low gender-related wage differentials. Supporting data for this approach were provided to AID/W in the Thailand WID Action Agenda of 1989.

Children are expected to benefit most from improved health as a result of better infrastructure and sanitation. Women, as primary health care givers for children, will also benefit in terms of reduced time and cost spent on illnesses. No adverse effects are expected from the Project on women or children.

³All urban Centers, including Bangkok.
Source: NESDB

THE USE OF DA FUNDS FROM THE U.S.-THAI DEVELOPMENT PARTNERSHIP PROJECT

A. GUIDING PRINCIPLES

The use of grant resources in support of the HG Project will follow the same principles as outlined in the U.S.-Thai Development Partnership Project (493-0350):

"The Partnership will pursue its objectives through the identification, development, nurturing and enhancing of the development impact of highly leveraged strategic partnerships. The strategic partnership -- any formal arrangement (e.g., a contract, MOU, etc.) among principals to implement and self-finance a priority development activity -- lies at the heart of the partnership concept. Strategic partnerships will assist Thailand in solving critical development problems in the two areas of Partnership program focus by establishing a network of long-term, self-financing collaborations between U.S. and Thai private and public sector entities.

The Partnership Project will identify priority problems falling within the project's stated purpose, develop potential alternatives for their resolution, and nurture and encourage the formation of self-financing U.S.-Thai partnerships that show good promise of providing solutions to the identified problems. For project purposes a "strategic partnership" (linkage or collaboration) occurs when a formal agreement or arrangement (e.g., contract, MOU, etc.) is concluded among U.S. and Thai principals to implement a priority development activity falling within the project purpose. Partnerships can be formed between private, public, university, and non-governmental organizations or any combination thereof. The self-interest of the partners, as evidenced by their willingness to invest their own financial and management resources, will tend to ensure much greater sustainability than traditional donor-financed approaches to development assistance.

9/8

The emphasis on strategic partnerships is a direct consequence of the determination in developing a new USAID strategy for Thailand that the most helpful and feasible role for USAID, with its limited resources, would be to act as an intermediary in identifying and providing access to U.S. expertise for solutions to Thailand's most pressing development problems.

The strategic partnership opens a unique window to policy reform and institutional change not offered by traditional AID projects. It can place policy reform and institutional change in the context of a concrete activity with a tangible, highly desirable outcome. By so doing, the partnership approach can crystalize policy reform and institutional change issues in ways that may lead more quickly to reform and change. The potential for rapid policy reform and creation and/or enhancement of Thai institutional capacity to solve development problems is an important Partnership program characteristic.

The strategic partnership concept places USAID in the role of catalyst not of manager. USAID will not be involved in the management of activities covered by partnership agreements (e.g. provision of construction, operation, or maintenance services for hazardous and toxic waste facilities). Nevertheless, the Partnership Project may fund a limited amount of technical assistance (TA) outside the partnership agreements themselves for one to three years in order to enhance development impact of a partnership activity once consumated (e.g., three years of TA in revenue collection for a municipality that is a principal in a wastewater treatment facility contract). However, the commitment will be shorter in duration, substantially smaller in funding magnitude, and less extensive than for a typical USAID project. Such commitments must be sufficiently disassociated from the financing arrangements of the Partnership so as not to constitute a subsidy.

The strategic partnership approach increases the probability of sustainability by shifting the burden of finance and management from USAID to the participating partners. Self-interested investors with their own funds at risk, rather than AID's, are likely to exercise greater diligence in developing and implementing project plans.

The strategic partnership approach assumes USAID will be able to induce potential partners to secure non-project funds for the achievement of Thai development objectives by undertaking small activities that identify, demonstrate, or improve the scope for mutual interest. The source of funding is immaterial as long as it is secured by the strategic partners themselves."

99

B. THE ESTIMATED BUDGET PARTNERSHIP PROJECT FUNDS

The Mission will provide support for (1) Project management and Evaluation, and for (2) short-term technical assistance and twinning.

Estimated Budget

I. Project Management and Evaluation

Local hire 2 PSCs (@\$80,000 X4 years)	\$320,000
Evaluations Mid- and Final	\$100,000

II. Technical Assistance and Twinning \$875,000

C. DEVELOPMENT OF A WORK PLAN FOR TA AND TWINNING

Assistance will be provided to help BOT operators and municipalities to develop projects and to strengthen revenue streams to pay loans. TA will focus on cities borrowing for municipal infrastructure. Additional "enhancement grants" could be made available if US-Thai partnerships develop which meet the criteria of the U.S.-Thai Development Partnership Project. (See PP, p. 22).

Several areas have been identified for collaboration with the RTG, e.g. promotion of changes in property tax law, already been done; tax incentives for private sector participation in municipal services and infrastructure; and incentives for public-private partnerships in land development. Action in these areas would greatly expand the private sector involvement in environmental projects. (See Annex D.2 for a description of policy themes.)

Funds for short-term technical assistance and twinning will be approved when:

- a. A clear connection is made between the activity and the Project's objectives.
- b. The RTG can show that actions have begun to be taken on the activity, i.e., there has been some progress on the activity.

- c. Counterpart resources, from DTEC, local government, private sector, etc. are identified. If more activities are identified than can be funded with available resources, selection will take into account how additional funds are leveraged by each activity.
- d. The U.S. has a comparative advantage in terms of technologies or a solution to a problem.

For illustrative purposes, the on-going "twinning" project for U.S. and Thai cities indicates the kind of projects which will be funded. This project included four pairs of cities, with Thai and U.S. local officials exchanging visits. Each Thai team spent two weeks in a U.S. city, focusing on a high priority urban environmental problem. The U.S. team will provide hands on technical assistance in a one week follow up visit.

The pairs of cities and problem areas were:

Chiang Mai - Knoxville, Ta: This twinning will focus on the management of solid waste, looking at technologies for collection and disposal, and ways to improve fee collection and to develop by products which enhance revenues.

Samut Prakan - Corpus Christie, Tx: Samut Prakan is highly industrial and faces severe industrial pollution, as well as problems related to treatment of household wastewater. This exchange involves planning for a new sewerage treatment system. Participants will look at options for operation and maintenance and the organization of Samut Prakan's wastewater department. It also involves the introduction of the concept of impact fees for both industrial and residential development.

Pattaya - Savannah, Ga: The lack of waste water treatment from hotel and residences has had a negative impact on Pattaya's tourism. This twinning focuses on the management and operation of two new plants, water conservation, public environmental awareness, and financing options for additional wastewater capacity.

Bangkok - Sanitary District of San Francisco: The city of Bangkok is facing significant water shortages as demand increases without consonant increases in supply. This twinning focuses on the reduction of leakages and water conservation, as well as on waste water treatment and reuse..

The twinning project provides several additional opportunities to participants. It exposed Thai officials to the way U.S. cities go about problem solving, and to the interactions between local government, state and national bodies, and constituencies. Also, city managers in the U.S. view their role as encouraging local private sector growth, and are excellent proponents of public-private partnerships. Representatives of well-managed cities are credible spokesmen for their cities and for the industries operating in their localities. Cities provide a showcase for goods and services, such as transportation equipment, waste management services and pollution control technology. Cities often have important regional and State-wide links with industry and academia.

Another area for technical assistance is to strengthen local capacity to carry out environmental assessments of infrastructure projects. (See Environmental Analysis, ANNEX E.)

PRELIMINARY POLICY OBJECTIVES AND ACTIONS

The following objectives and potential actions represent the starting point for discussions on broad policy themes. This does not represent the technical assistance plan. This outline provides a general idea of the kind of actions A.I.D. would be willing to support. The requirements for technical assistance activities are described in Annex D.1.

THEME I SUSTAINABLE SYSTEM FOR FINANCING URBAN ENVIRONMENTAL
INFRASTRUCTURE PROJECTS

Objective: Increase the efficiency and effectiveness of central government financing for environmental infrastructure.

Action: Determine the costs/benefits of shifting central government budget transfers now given to municipalities for infrastructure projects from direct capital grants to debt service for a specified period of time, until local revenue generation improves. (NESDB)

Action: Determine the costs/benefits of incentives such as conditional or bonus grants to municipalities based on measurable progress towards improving performance in areas such as tax collection, cost recovery, compliance with environmental regulations, etc. using specific indicators. (DOLA and Budget Bureau)

Action: Analyze the feasibility and potential benefits of and recommend legislation to establish "infrastructure impact fees" for new land development to assure that private sector led growth pays its own way in the delivery of urban environmental infrastructure. (NESDB)

Objective: Encourage private sector participation in lending for new or improved urban environmental infrastructure.

Action: Determine incentives for expanding lending of credit guaranty facility that facilitates lending to municipal governments and the private sector for urban infrastructure.

Action: Promote the use of other appropriate financial instruments for raising private sector investment capital for long term financing of urban environmental infrastructure projects.- (Bank of Thailand/MOF).

THEME II ENHANCE MUNICIPAL CREDITWORTHINESS AND THE ABILITY OF LOCAL GOVERNMENTS TO USE LOAN RESOURCES FOR URBAN ENVIRONMENTAL INFRASTRUCTURE

Objective: Improve the property tax system as a reliable and equitable source of local revenue.

Action: Promote the benefits of a unified property tax system and propose legislation to replace the existing two property taxes under their separate Acts. [MOF and MOI (DOLA)].

Action: Phase in modifications to the tax administrative structure which will separate the responsibilities of property tax assessment from tax calculation and collection.

Action: Phase in procedures to annually update municipal property tax rolls on a computerized data base open to public scrutiny and shared between central and local governments. (DOLA)

Objective: Improve cost recovery of municipality owned and operated water supply, wastewater, and solid waste services.

Action: Phase in appropriate fee structures that assure full cost recovery for operation, maintenance and debt service of municipal water supply services. (already submitted to Cabinet for RCDP II)

Action: Phase in pricing policies (a combination of fees and taxes) adequate to provide for full O&M costs and partial debt service in waste water and solid waste services. (60 out of 85 cities agreed to collect users fees in recent OUD survey.)

THEME III IMPLEMENT THE "POLLUTER PAYS" CONCEPT THROUGH THE IMPROVEMENT OF THE REGULATORY FRAMEWORK AND PUBLIC ACTION ASPECTS OF URBAN ENVIRONMENTAL QUALITY MANAGEMENT

Objective: Increase compliance with existing environmental laws and regulations for wastewater, water supply, and solid waste.

Action: Introduce at the municipal level an urban environmental quality monitoring program developed for public sector engineers and technicians to meet the technical capacity requirements of various pollution control laws and regulations. (Institute of Local Administration and Local Development, MOSTE to develop modules. MOI does training).

Action: Develop effective incentives/disincentives to induce the private sector to control its pollution. (NESDB)

Objective: Increase environmental awareness, responsibility and management authority at municipal levels of government.

Action: Introduce selective exchange of officials across sectors and up and down the levels of urban institutions to increase sensitivity and knowledge of the multidimensional nature of urban environmental management, e.g., twinning of Thai cities (DOLA)

Action: Provide municipal governments with information about the range of tested technologies and organizational systems which can reduce capital costs and facilitate cost recovery in urban environmental services, e.g., twinning of U.S.-Thai cities

Action: Involve nongovernmental organizations in the development and distribution of environmental education materials designed to raise public awareness and enlarge the constituency for improved environmental control; and establish incentives and programs to conserve and recycle resources.

THEME IV INCREASE PRIVATE PARTICIPATION IN THE PROVISION OF URBAN ENVIRONMENTAL INFRASTRUCTURE AND SERVICES

Objective: Increase private sector responsibility for providing on-site infrastructure.

Action: Develop guidelines and provide training to local officials in how to effectively use the release of municipal lands for private development to obtain private investment in infrastructure which serves areas beyond that being developed. (DOLA)

Objective: Increase private sector participation in managing urban environmental services.

Action: Develop guidelines and promote the use of BOO/BOT models for waste management and other urban infrastructure and services.

5

Action: Expand on the experience of the UNDP funded Privatization of Urban Services Project by encouraging municipalities to set aside certain services such as maintenance of street lights, street cleaning and landscaping for bidding among small businesses/entrepreneurs.

Action: Identify specific infrastructure projects and larger scale service provision opportunities, e.g., solid waste recycling and disposal; drainage maintenance; sewage collection and treatment, etc. compatible with both RTG development needs and private sector capability which may be appropriate for international bidding. (DOLA)

Action: Develop model TORs for joint ventures and for municipalities to structure and implement public/private partnerships. (DOLA)

US-AEP URBAN ENVIRONMENTAL INFRASTRUCTURE PROGRAM

Grant Proposal

1. Purpose

The US-Asia Environmental Partnership (US-AEP) grant resources will be used in conjunction with HG investment capital to enhance the access of US company participation in both publicly and privately owned urban environmental infrastructure projects. In the area of publicly owned projects, the grant monies will promote the use of US equipment and services. The monies will also be used to promote US companies and consortia to develop private projects under the Build-Own-Transfer (BOT) and Build-Operate-Own (BOO) models.

2. Use of Funds

The US-AEP will make \$1 million dollars available for a two year program. The monies will be allocated as follows:

- \$200,000 for an Urban Environmental Infrastructure Technical Representative based in Thailand
- \$300,000 to promote access to the US
- \$500,000 for private project (BOO/BOT) and public project (bid-related) enhancements

A. Urban Environmental Infrastructure Technical Representative - Thailand (\$200,000)

The US-AEP will grant \$200,000 to the US-Thai Partnership Development Project to hire one Urban Environmental Infrastructure Technical Representative (TR) in Thailand. The TR will be a local hire brought into the company or institution selected to implement the Partnership Project. This approach will allow the TR to easily call upon various technical and financial resources of the Partnership Project.

TR will identify environmental infrastructure business opportunities for US companies and US-based consortia, and s/he will help develop these opportunities into actual sales and private projects. The TR will cover opportunities for the export of goods and services to Thai municipalities, which may own and operate one or more projects; as well as opportunities to establish privately owned projects under a BOT or BOO

arrangement. In the case of BOO/BOT projects, ownership may be totally private or shared between private and public entities (e.g., a US consortium of private companies and a Thai municipality). Other arrangements may also be developed, such as having a US company operate and maintain a publicly owned project, or exporting US goods and services to a non-US BOT project.

A summary of the major tasks of the TR is given below:

- Project Identification: The TR will work with the RTG, municipalities, multilateral development banks, and other relevant organizations to identify the "universe" of high priority municipalities that plan to make significant investments in foreign equipment and/or services over the next several years. S/he will also identify those municipalities that are exploring private ownership schemes. Since private ownership of projects is new to Thailand (and virtually unknown to Thai water authorities), the TR will enter into discussions with the RTG officials and management of municipalities to assess their interest and determine which projects might be suitable for this approach.

- Procurement Opportunities: Where the TR identifies significant procurement opportunities for US goods and services, s/he will prepare summaries with relevant supporting materials. These profiles will be forwarded to the US to be distributed to private companies through the US network of the TR (through the cooperative agreement with the US-Thai Partnership Development Project, see below).

The network should include the US-AEP Infrastructure Finance Advisory Service (IFAS), the US-AEP trade lead system (GEM, under the Technology Cooperation Component), and the DOC's TOP system. The US Broker/Facilitator (see below) will work with various US-AEP programs (e.g., WEC exchanges and NASDA grants) to help US companies better understand the opportunities at hand and to help these companies position themselves with the Thai buyers.

- BOO/BOT Opportunities: For potential BOO/BOTs, the TR will assist in various stages of the project development process. S/he will gather available reports, data, etc. on the project opportunity, such as estimates of product (e.g., water) supply and demand, profiles of potential end users (e.g., surrounding industry, hotels, and urban households), and any indications that the concerned municipality and/or RTG is interesting in attracting private owners and operators.

The Contractor will work with the US-AEP, the US-Thai Partnership Development Project, USAID programs, etc. to offer a variety of seminars, training programs, orientation visits and other market awareness activities to the RTG, municipalities, Thai banks, and other players interested in exploring the issues associated with private ownership arrangements. S/he will provide support to both private companies and appropriate Thai officials as a project develops from the pre-feasibility stage to the feasibility study and on to contract negotiations, business and financing plans, etc.

For both public and private projects, the Contractor will work closely with the RHUDO office and the manager and staff of the US-Thai Partnership project on policies, regulations, and other institutional issues relating to the HG guaranty program.

B. Access to the US (\$300,000)

The US-AEP grant will also include a sum of \$300,000 to promote Thai access to US goods, services, as well as technical expertise in the area of BOO/BOT projects.

1. US Broker/Facilitator (\$100,000)

It is proposed that \$100,000 (\$50,000 per year) be allocated directly by US-AEP to place a US broker/facilitator at a major US trade association, probably the Air and Water Equipment Manufacturers Association (AWEA). This constitutes 50% of the estimated cost of this activity. The other 50% will be borne by RHUDO/Indonesia, which has agreed to such a cost sharing arrangement. The \$200,000 or \$100,000 per year will buy a relatively senior person at AWEA, which is prepared to waive overhead costs.

Based on specific local needs, the US broker will identify US equipment manufacturers and service companies, provide early warnings and other relevant data to these companies, and help the companies access funding on a cost-sharing basis to travel to Thailand to conduct fact-finding, make important contacts, etc. Being situated inside a major trade association will enable the US broker to access resources, such as data bases of companies, make presentations in association-sponsored seminars, etc. Moreover, the association will lend legitimacy to the person when s/he approaches individual companies to discuss specific opportunities.

The US broker will be full-time based in the US, but s/he will make trips, as needed, to Thailand (and Indonesia)

to get a thorough grounding in the project opportunities being pursued.

2. Institution Support for BOO/BOT Projects (\$200,000)

The US-AEP will also grant \$200,000 (\$100,000 per year) to the US-Thai Partnership Development Project to promote US-Thai collaborations around urban environmental infrastructure projects, especially BOT/BOT arrangements. Although the funds will be transferred to the USAID/Thailand, the US-Thai Partnership Development Project will use this money to provide technical services around specific BOO/BOT opportunities being entertained by Thai municipalities, water authorities, etc. It is believed that this kind of expertise will not be available from the US broker with his/her trade association link.

Through this grant, the US-Thai Partnership Development Project will be able to provide a range of activities. For example, after the Thai-based technical representative has identified a potentially bankable BOO/BOT project and Thai officials have expressed their interest in exploring this kind of option, the US-Thai Partnership Development Project may organize an training seminar in Thailand around BOO/BOT issues for key decision makers. Or it may arrange to have Thai officials or technical staff tour the US to visit privately owned and operated plants.

A grant to the US-Thai Partnership Development Project for the exclusive promotion of urban environmental infrastructure will give the program an institutional capability not available through a single direct hire. Moreover, it will leverage resources, since the US-Thai Partnership Development Project will be able to devote (from in-house or subcontracts) technical staff with different skills on an "as needed" basis to US-AEP/HG project needs.

C. Enhancement Grants (\$500,000)

The US-AEP will grant \$500,000 (\$250,000 per year) through the US-Thai Partnership Project for training, project-related studies, and other activities needed by the RTG, municipality or other clients to enhance US participation in both publicly or privately owned projects. The grant monies would only be made available after a US bidder is selected for a contract of goods and/or services. In the case of BOO/BOTs, grants will usually be made after a US company or US-based consortium has completed feasibility work, after initial

negotiations with the RTG have taken place (all contractual obligations need not be signed), and at the time the company and/or consortium is putting together a financing plan.

The grants will be awarded to the RTG or appropriate Thai organization and not to the successful company or consortium in order to avoid any suggestion that the grant is tied or being offered as part of the bid package. Such grants have been used successfully by the Trade Development Agency in helping US equipment suppliers and engineering companies win competitive tenders. They should prove to be especially valuable in helping to promote US-led private projects. In the case of private projects local governments, municipalities, and water authorities, etc. will require significant assistance in areas such as setting up revenue collection systems, price setting, and preparing water purchase contracts that share risks in an equitable way.

3. Leveraging the US-Thai Partnership Development Project

In the PID, the US-Thai Partnership Development Project originally committed \$1.225 to complement the US-AEP grant assistance for the US-AEP/HG Urban Environmental Infrastructure Project. These monies will be used to support:

\$535,000 TA for policy issues, environmental assessments, improving credit worthiness of borrowers

\$300,000 Twinning and other exchanges

\$420,000 Project Management and Evaluation

Since the PID, the Mission has agreed to allocate additional resources (approximately \$500,000) for incentive grants, i.e., grants made to US companies and/or US-based consortia on a cost-sharing basis to help them to 1) prepare pre-feasibility studies, and 2) develop detailed feasibility studies and business plans for BOO/BOT projects. These monies will be awarded after limited competitive bidding with an emphasis on cost sharing to achieve the highest leverage possible. The RTG and concerned municipality (or other relevant entity) will be allowed to select the grantee/s (with technical assistance offered through the Partnership) to ensure that the Thai government and municipalities take ownership of the process. Early involvement on the part of the Thai officials will help firm up their commitment to the US companies that the US-AEP project is trying to serve.



U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT, THAILAND
REGIONAL SUPPORT MISSION FOR EAST ASIA

August 24, 1993

ACTION MEMORANDUM FOR THE ASIA BUREAU ENVIRONMENTAL OFFICER

THROUGH: Thomas H. Reese Jr. - Mission Director, USAID/Thailand 

FROM: J. David Foster, - Mission Environmental Officer

ACTION: To approve a Categorical Exclusion from Environmental Procedures for USAID/Thailand's Urban Environmental Infrastructure Support Project (493-HG-005).

BACKGROUND: The Urban Environmental Infrastructure Support Project (UEISP) will consist of support for an intermediate credit institution and training and technical assistance in support of environmental infrastructure implementation and finance. The goal of this project is to assist Thailand to address key urban environmental problems, and the purposes are: a) to facilitate the design and implementation of a sustainable system for financing priority investments in environmental infrastructure, and b) to make capital and U.S. technology available for the design, construction, operation and maintenance of urban infrastructure projects.

In order to accomplish these purposes USAID will provide support for an intermediate credit institution called a loan guaranty facility. This facility will encourage bank lending for urban environmental infrastructure by providing repayment guarantees for approved projects. The guaranty facility, the banks, and the Royal Thai Government will have complete review and approval authority for these infrastructure projects. UEISP is therefore eligible for a Categorical Exclusion from Environmental Procedures under 22 CFR Parts 216.2(c)(2)(i) and 216.2(c)(2)(x).

However, USAID and the Environmental Impact Assessment Division of the Ministry of Science, Technology and Environment have agreed that there will be thorough consideration of potential adverse environmental impacts of any infrastructure financed under this project. In addition, USAID will specifically provide training and technical assistance designed to improve existing environmental review procedures. Development of funding criteria (to be satisfactory to USAID), which includes environmental considerations, will be included in the Conditions Precedent of the Project Agreement.

RECOMMENDATION: That you sign below indicating your approval of the attached Initial Environmental Examination, which states that the project is Categorically Excluded from further environmental procedures.

Approved/Disapproved

H. Ker, ASIA/DR 9-24-93

JUSTIFICATION FOR CATEGORICAL EXCLUSION

Environmental procedures for AID are established in 22 CFR part 216. These procedures are designed to assure that environmental factors and values are integrated into the A.I.D. decision making process and are intended to implement the requirements of the National Environmental Policy Act as they affect the A.I.D. program.

The UEISP is fully consistent with the goals and purposes of part 216. The project is specifically designed to improve environmental quality by improving finance for urban infrastructure, particularly water supply, waste water treatment and solid waste disposal. In addition, training and technical assistance is specifically provided to improve and upgrade the capacity of Thai institutions to evaluate potential environmental impacts indirectly arising from these infrastructure projects.

While the UEISP will provide training, financial and technical assistance, the actual assessments will be performed and reviewed by Thai institutions. A.I.D. will not have advance knowledge or control over individual projects and will thus not be in a position to conduct assessments on its own.

Although UEISP will be fully consistent with the purposes of section 216 and it will help to assure that all potential environmental impacts are subject to effective review, the UEISP is entitled to a categorical exclusion from the procedural requirements under this section. The conditions for categorical exclusion are spelled out under §216.2(c)(2).

UEISP provides for two basic categories of assistance:

- 1) Training and technical assistance (not including construction of facilities) and
- 2) Financial support for an intermediate credit institution.

The training and technical assistance is specifically identified as qualifying for a categorical exclusion under §216.2(c)(2)(i):

"Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.);"

Financial assistance is provided through support for an intermediate credit institution, the Loan Guaranty Facility. This facility will promote bank lending for urban environmental infrastructure by providing repayment guarantees for approved projects. Implementation; including assessment, review, and approval of projects; will be performed by Thai, consultants, credit institutions and government agencies subject to the criteria established for this program. While AID has established basic criteria and program direction, it will not have knowledge of individual projects prior to funding nor will it have control over individual projects selected. This support for an intermediate credit institution is also specifically identified as qualifying for a categorical exclusion under §216.2(c)(2)(x):

"Support for intermediate credit institutions when the objective to assist in the capitalization of the institution or part thereof and when such support does not involve reservation of the right to review and approve individual loans made by the institution;"

Despite these categorical exclusions from procedural requirements, both USAID and the RTG are committed to inclusion of environmental criteria for infrastructure activities under UEISP. All projects proposed for funding with guarantees under UEISP will first be subjected to environmental analysis by an independent environmental consultant registered for that purpose with the Ministry of Science, Technology and Environment. In addition to the environmental analysis performed on behalf of the project proponents, project supporters will also have to assure that their analysis has also been reviewed by the Ministry of Science Technology and Environment or other competent independent environmental review body.

Furthermore, development of funding criteria (to be satisfactory to USAID), which includes environmental considerations will be included in the Conditions Precedant of the Project Agreement. Periodic evaluations will be conducted by USAID, reviewing a representative sample of projects, to determine if the intermediate credit institution and the local authorities have complied with the conditions precedent as well as their own environmental policies.

Although USAID will not have the right of individual project review or approval, the Mission is assured that environmental considerations will be integrated into this process.

Appraisal of Thai Institutional Capacity to Perform Environmental Reviews and Impact Assessments

BACKGROUND:

As part of the Threshold Environmental Review for the Urban Environmental Infrastructure Support Project in Thailand an Initial Environmental Examination (IEE) was conducted to determine the applicability of regulation 216 and the appropriate measures to be employed to fully comply with both the spirit and the letter of this regulation. In the course of this review it was determined that a categorical exclusion would be appropriate with the strong proviso that USAID-Thailand would make a substantial contribution in coordination with the UEISP toward strengthening the capacity of Thai institutions to perform environmental reviews and impact assessments.

INSTITUTIONAL RESPONSIBILITIES FOR ENVIRONMENTAL ASSESSMENTS:

The new environmental act authorizes the minister of the Ministry of Science, Technology, and Environment (MOSTE), with the approval of the National Environment Board (NEB), to specify the types and sizes of projects or activities which are required to prepare reports on environmental assessment. MOSTE, through publication in the Government Gazette, will define the rules, methods and guidelines for the preparation on an environmental impact assessment report. The basic process is as follows:

- 1) MOSTE establishes guidelines for preparation of environmental impact assessments and criteria for licensing environmental consultants;
- 2) Project proponents contract with a licensed independent environmental consultant to conduct the required environmental analysis and, if necessary, prepare the EIA;
- 3) The Division of Environmental Impact Assessment within MOSTE reviews and comments on the EIA and submits it to the appropriate impact assessment committee;
- 4) The impact assessment committee (made up of representatives of NGOs, technical experts and relevant agencies and universities) reviews the assessment and makes recommendations for final disposition.

Responsibility for implementing the EIA related provisions of the act lie primarily with the Office of Environmental Planning and Policy (OEPP). This office currently has approximately forty environmental specialists, most of whom hold masters level degrees. In addition, the criteria established for obtaining a license to provide environmental consulting and prepare EIAs appear quite stringent, requiring a combination of advanced degrees and extensive environmental experience.

115

This program was originally designed to address potential industrial projects and major construction projects such as dams and harbors. Although it was not initially intended to require review of municipal environmental infrastructure, the Director of the Environmental Impact Assessment Division has agreed to take on this responsibility for purposes of projects arising under the UEISP.

In developing this program, the RTG has relied heavily on the procedures used in the United States as developed under the National Environmental Policy Act. This includes the mitigation measures and monitoring programs, which are a part of the conditions stated in the permitting of licenses by the permitting agency. A "Manual of NEB Guidelines for Preparation of Environmental Impacts Evaluations" was prepared by a consultant in 1979 (funded by A.I.D.).

Other Government Agencies:

In addition to the responsibilities of MOSTE, the Department of Local Administration of the Ministry of Interior has responsibility to assist local communities in the development of EIAs. Bangkok Metropolitan Administration and Pattaya City Administration also hold similar responsibility within their respective jurisdictions.

While MOSTE has primary responsibility for basic standards and policies, responsibility for enforcement is divided among a number of different agencies including: The Ministry of Industry, the Police Department, the Provincial Governors, the Department of Health and the Industrial Estate Authority of Thailand.

NGOs and Public Participation:

NGOs are increasingly active on environmental issues in Thailand and they and the Universities are expressly authorized to participate in this process. Thailand is still wrestling with the public participation process, however, and there currently are no provisions requiring public hearings on environmental matters.

TARGETS FOR ENVIRONMENTAL TRAINING AND TECHNICAL ASSISTANCE:

Priority targets for additional environmental training and technical assistance include the following basic categories:

- ◆ Licensed environmental consultants,
- ◆ Employees of the Division for Environmental Impact Assessment (MOSTE),
- ◆ Municipal officials, and
- ◆ NGOs.

MOSTE feels that at the present time their staff and the licensed EIA experts need assistance in the development of criteria and using these to make determinations on which activities will have potential impact on the environment. They would like assistance in structuring the methodology to be used. They would also like assistance in incorporating public participation techniques into their process. Particular areas of interest expressed by MOSTE representatives include the following:

a. Suggested technical assistance

- 1.) Establish methodologies of assessment to be used by all.
- 2.) Develop computer software for EIA users, so as to standardize the approach used.
- 3.) Short term TA by EPA EIA experts (or consultants) to review procedures being used and advise on improving the process. (This was already proposed through the MANRES Program, but not funded).
- 4.) How to incorporate public participation into the EIA process.

b. Suggested study tours

- 1.) MOSTE employees make study tours to offices of EPA or state agencies to study the EIA process, and learn how to use the public participation process, in order to obtain ideas on improving the process.
- 2.) Selected consultants who are licensed to prepare EIAs, make study tours to offices of EPA or state agencies to study the EIA process, and obtain ideas on improving the process of preparing EIAs.

c. Suggested workshops

- 1.) Workshop by EPA experts on developing methodologies of assessment and the development of computer software for EIA users.
- 2.) Workshop by EPA experts to MOSTE and licensed consultants on preparing and reviewing EIAs.
- 3.) Workshop on public participation techniques.

DRAFT

Guaranty Authorization
Project No. 493-HG-005
(Authorization No. 493-HG-005)

Provided from: Housing Guaranty Authority

For: Royal Thai Government

Pursuant to the authority vested in the Mission Director by the Foreign Assistance Act of 1961, as amended (FAA) and the Delegations of Authority issued thereunder, I hereby authorize the issuance to eligible U.S. Investors (Investors) acceptable to A.I.D. of guaranties pursuant to Section 222 of the FAA of not to exceed United States Dollars _____ Million only (U.S. Dols ,000,000) in face amount. The guaranties shall assure against losses as provided in the Housing Guaranty standard terms and conditions (22 C.F.R. Part 204) with respect to loans; including any refinancings thereof. These guaranteed loans shall be made to the Royal Thai Government (Borrower) to support the provision of Environmental Infrastructure which benefits low-income residents in Thailand's cities.

These guaranties shall be subject to the following terms and conditions:

1. Term of Guaranty: The loans and any refinancing thereof shall extend for a period of up to thirty (30) years from the date of each disbursement of the loans and may include a grace period of up to ten (10) years on repayment of principal, during which time interest shall accrue and be payable, and contain such other terms and conditions as are agreed to by the Borrower, and the Investor, subject to the approval of A.I.D. to the guaranties of the loans shall extend for a period beginning with the first disbursement of the loans and shall continue until such time as the investor has been paid in full pursuant to the terms of the loans.
2. Interest rate: The rate or rates of interest payable to the Investor pursuant to the loans shall not exceed the allowable rate of interest prescribed pursuant to section 223(F) of the Foreign Assistance Act of 1961, as amended (FAA), and shall be consistent with the rates of interest generally available for similar types of loans made in the long-term U.S. capital markets.

3. Royal Thai Government Guaranty: Prior to disbursement of any loan amounts pursuant to this Guaranty Authorization, a written guaranty to indemnify A.I.D. against all losses arising by virtue of A.I.D.'s guaranties to the investor or from non-payment of the A.I.D. fee shall be provided in a form satisfactory to A.I.D. by the Royal Thai Government (or a financial institution authorized by the Royal Thai Government to provide such a Guaranty and approved by A.I.D.).

4. Fee: The fee of the United States shall be payable in U.S. Dollars and shall be equal to one-half of one percent (1/2 percent) per annum of the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent (1 percent) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.

5. Other Terms and Conditions: The Guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

In accordance with the provisions of the Federal Credit Reform Act of 1990, I hereby authorize the obligation of United States Dollars _____ to cover the subsidy cost of Authorization No. 493-HG-005 and for use of United States Dollars _____ Million (Dols __,000,000) in Guaranty Authority. Action must be taken to obligate these funds by no later than September 30, 1993 by receiving from the Royal Thai Government the countersigned Letter of Advice. The guaranteed loans must be disbursed by no later than September 30, 1998, after which time the obligated funds expire.

For signature by: _____
Thomas H. Reese, III
Mission Director
USAID/Thailand

Date: _____

DATE

ADDRESSEE

Subject to the terms of this Letter of Advice and such terms and conditions to be further agreed upon in an Implementation Agreement and in consideration for such policy changes and other commitments to be made by the Royal Thai Government ("Borrower") as set forth below,

The Agency for International Development ("A.I.D.") has agreed to guaranty loans to the Borrower of up to _____million United States Dollars (US Dols __,000,000) to finance costs associated with urban environmental investments in Thailand.

As set forth in detail in the approved Project Paper forming the basis for the Authorization of the Guaranty, the purpose of this project is to assist the Government of Thailand to establish a system for financing investments in urban environmental infrastructure by supporting a new public-private guaranty facility for such financing. The HG Project may provide up to \$100 million in HG loans to match RTG paid in capital for this new facility. The loans will be authorized incrementally.

A.I.D.'s commitment to guaranty the loans is valid for a period of 24 months from the date this Letter of Advice is countersigned. Should the Borrower fail to execute a loan agreement within that period, A.I.D. reserves the right to cancel its commitment to guaranty.

A.I.D.'s issuance of a guaranty for the first loan is dependent on the Royal Thai Government's demonstrated support for the establishment of the guaranty facility for loans for environmental infrastructure projects and for securing equity contributions from commercial financial institutions. Prior to the issuance of guaranties for subsequent loans, the Borrower will present eligible expenditures satisfactory to A.I.D.. these requirements will be set forth in an Implementation Agreement to be signed by the USG and the RTG.

We appreciate your commitment to successful project implementation and look forward to close collaboration with you in this important effort.

FOR SIGNATURE BY: _____

Thomas H. Reese, III
Mission Director
USAID/Thailand

120

Accepted and Agreed as of the
Date first above written:

The Royal Thai Government
Acting by and through its
Ministry of Finance

BY: _____
(NAME)
TITLE

ATTACHMENT:
ANNEX A: Term Sheet

TERM SHEET

Urban Environmental Infrastructure
Sippont Project
Housing Guaranty
Project No. 493-HG-005
Authorization No. 493-HG-005

Borrower: Royal Thai Government

A. Terms and Conditions:

1. Term of Guaranty: The loans (including any refinancing thereof) shall extend for a period of up to thirty (30) years from the date of each disbursement and may include a grace period of up to ten (10) years on repayment of principal and such other terms and conditions as may be agreed by the Borrower and the Investor, subject to the approval of A.I.D. The guaranties of the loans shall extend for a period beginning with the disbursement of the loans and shall continue until such time as the investors have been paid in full pursuant to the terms of the loans.

2. Interest Rate: The rate of rates of interest payable to the investors pursuant to the loans shall not exceed the allowable rate or rates of interest prescribed pursuant to section 223(F) of the Foreign Assistance Act of 1961, as amended ("FAA"), and shall be consistent with the rates of interest generally available for similar types of loans made in the long-term U.S. capital markets.

3. Royal Thai Government Indemnity: The full faith and credit of the Royal Thai Government shall be pledged to indemnify A.I.D. in U.S. dollars against all losses arising by virtue of A.I.D.'s guaranties to the investors or from non-payment of the A.I.D. fee. The indemnity obligations of the Government of Thailand shall be set forth in the implementation agreement.

4. Fee: The A.I.D. fee shall be payable by the Borrower in U.S. dollars and shall be equal to one-half of one percent (1/2 percent) per annum of the outstanding guaranteed amount of the loans plus a fixed amount equal to one percent (1 percent) of the amount of the loans authorized or any part thereof, to be paid as A.I.D. may determine upon disbursement of the loans.

5. Selection of Investors: At a time agreed to by A.I.D. and the Borrower, A.I.D. will publish an announcement informing interested and eligible U.S. investors, as defined in Section 238(c) of the FAA, of the A.I.D. authorization and inviting such investors to communicate with the Borrower directly. The text of the announcement will be agreed upon by A.I.D. and the Borrower prior to its publication.

1-2

6. Approval of Investors: A.I.D.'s concurrence in the selection of investors is necessary prior to the Borrower's signing a loan commitment. This concurrence will be based upon receipt of copies of loan proposals, including name, interest rate, related fees, special conditions, and the reasons for the Borrower's proposed selection as well as a copy of the commitment the Borrower proposes to sign.

7. Termination of Commitment: A.I.D.'s commitment to guaranty loans to the Borrower is valid for a period of 24 months from the date of this letter. Should the Borrower fail to execute the loan agreement within that period, A.I.D. reserves the right to terminate its commitment to guaranty.

8. Other terms and conditions: The guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

B. Implementation Documents

1. Implementation Agreement covering the project between Borrower and A.I.D.
2. Loan agreement (or equivalent agreement) covering the loan between Investors and Borrowers.
3. A loan-associated paying and transfer agency agreement, between the Borrower and the A.I.D.-Approved paying agent (The Riggs National Bank of Washington D.C.) to facilitate loan servicing.
4. Standard terms and conditions (codified at 22 C.F.R., Part 204) covering the guaranty of the loans between the investors and A.I.D.

3

Urban Environmental Support
Project No. 493-HG-005
(Revised September 1993)

ANNEX G

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to the eligibility of countries to receive the following categories of assistance: (A) both Development Assistance and Economic Support Funds; (B) Development Assistance funds only; or (C) Economic Support Funds only.

COUNTRY ELIGIBILITY CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUND ASSISTANCE

1. Narcotics Certification

(FAA Sec. 490): (This provision applies to assistance provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance relating to international narcotics control, disaster and refugee relief assistance, narcotics related assistance, or the provision of food (including the monetization of food) or medicine, and the provision of non-agricultural commodities under P.L. 480. This provision also does not apply to assistance for child survival and AIDS programs which can, under section 542 of the FY 1993 Appropriations Act, be made available notwithstanding any provision of law that restricts assistance to foreign countries.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct

source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government):

(1) has the President in the April 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 calendar days, of a resolution disapproving such a certification), that (a) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals and objectives established by the U.N. Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, or that (b) the vital national interests of the United States require the provision of such assistance?

(2) with regard to a major illicit drug producing or drug-transit country for which the President has not certified on April 1, has the President determined and certified to Congress on any other date (with enactment by Congress of a resolution approving such certification) that the vital national interests of the United States require the provision of assistance, and has also certified that (a) the country has undergone a fundamental change in government, or (b) there has been a fundamental change in the conditions that were the reason why the President had not made a "fully cooperating" certification.

The President in March 1993 certified that Thailand is fully cooperating with the United States or has taken adequate steps on its own sufficient to satisfy the requirements for certification under FAA Section 481(h)

N/A

125

2. Indebtedness to U.S. citizens (FAA Sec. 620(c): If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity?

No

3. Seizure of U.S. Property (FAA Sec. 620(e)(1)): If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

No

4. Communist countries (FAA Secs. 620(a), 620(f), 620D; FY 1993 Appropriations Act Secs. 512, 543): Is recipient country a Communist country? If so, has the President: (a) determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by

No

the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism, or (b) removed a country from applicable restrictions on assistance to communist countries upon a determination and report to Congress that such action is important to the national interest of the United States? Will assistance be provided either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan?

None of the listed countries will receive assistance under this Project

No

5. Mob Action (FAA Sec. 620(j)): Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property?

No

6. OPIC Investment Guaranty (FAA Sec. 620(l)): Has the country failed to enter into an investment guaranty agreement with OPIC?

No

7. Seizure of U.S. Fishing Vessels (FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5): (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? (b) If so, has any deduction required by the Fishermen's Protective Act been made?

No

8. Loan Default (FAA Sec. 620(g); FY 1993 Appropriations Act Sec. 518 (Brooke Amendment)): (a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1990 Appropriations Act appropriates funds?

(a) No

(b) No

9. Military Equipment (FAA Sec. 620(s)): If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

N/A

10. Diplomatic Relations with U.S. (FAA Sec. 620(t)): Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No.

11. U.N. Obligations (FAA Sec. 620(u)): What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking into Consideration" memo.)

Thailand is current in its payments

12. International Terrorism

a. Sanctuary and support (FY 1993 Appropriations Act Sec. 554; FAA Sec. 620A): Has the country been determined by the President to: (a) grant sanctuary from prosecution to any individual or group which has committed an act of international terrorism, or (b) otherwise support international terrorism, unless the President has waived this restriction on grounds of national security or for humanitarian reasons?

(a) No

(b) No

b. Airport Security (ISDCA of 1985 Sec. 552(b)). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures?

No

13. Discrimination (FAA Sec. 666(b)): Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA?

No

14. Nuclear Technology (FAA Secs. 669, 670): Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.)

To our knowledge no such event has occurred

No

15. Algiers Meeting (ISDCA of 1981, Sec. 720): Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.)

Thailand was not represented at this meeting

129

16. Military Coup (FY 1993 Appropriations Act Sec. 513): Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?

Subsequent to the 1991 Military Coup, the Secretary of State, notified the Congress that a democratically elected government has taken office, prior to the resumption of assistance

17. Refugee Cooperation (FY 1993 Appropriations Act Sec. 538): Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?

Yes

18. Exploitation of Children (FAA Sec. 116(b)): Does the recipient government fail to take appropriate and adequate measures, within its means, to protect children from exploitation, abuse or forced conscription into military or paramilitary services?

No.

B. COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO DEVELOPMENT ASSISTANCE ("DA")

1. Human Rights Violations (FAA Sec. 116): Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

No

2. Abortions (FY 1993 Appropriations Act Sec. 534): Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary

No

sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

C. COUNTRY ELIGIBILITY CRITERIA APPLICABLE ONLY TO ECONOMIC SUPPORT FUNDS ("ESF")

N/A

Human Rights Violations (FAA Sec. 502B): Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest?

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

Yes

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. Host Country Development Efforts (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to:

- (a) increase the flow of international trade;
- (b) foster private initiative and competition;
- (c) encourage development and use of cooperatives, credit unions, and savings and loan associations;
- (d) discourage monopolistic practices;
- (e) improve technical efficiency of industry, agriculture, and commerce; and
- (f) strengthen free labor unions.

2. U.S. Private Trade and Investment (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

1:

- (a) An objective of the Partnership is to stimulate trade flows between the U.S. and Thailand and to generally enhance the attractiveness of joint U.S.-Thai investments in Thailand; these efforts should increase overall international trade;
- (b) by enhancing the investment climate in Thailand and providing more opportunities for commercial relationships with U.S. businesses, the Partnership should stimulate both Thai and U.S. private initiative and competition;
- (c) no significant impact;
- (d) by making more U.S. companies aware of commercial opportunities in Thailand, and encouraging U.S.-Thai linkages, more companies will enter the Thai market and diminish the possibility of monopolies;
- (e) by stimulating the competitive environment, companies will be forced to remain competitive;
- (f) no significant impact.

2: A specific objective of the project is to stimulate U.S. trade with an investment in Thailand by making U.S. businesses more aware of commercial opportunities in Thailand in the two areas of project concentration.

3. Congressional Notification

a. General requirement (FY 1993 Appropriations Act Sec. 522; FAA Sec. 634A): If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the Appropriations Act notification requirement has been waived because of substantial risk to human health or welfare)?

A Congressional Notification has been prepared for this project. It cleared without Congressional objection in September 1993

b. Notice of new account obligation (FY 1993 Appropriations Act Sec. 514): If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?

N/A

c. Cash transfers and nonproject sector assistance (FY 1993 Appropriations Act Sec. 571(b)(3)): If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?

N/A

4. Engineering and Financial Plans (FAA Sec. 611(a)): Prior to an obligation in excess of \$500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes; such information is included in the Project Paper for the U.S. Thailand Development Partnership which will be the conduct for all grant resources connected with this HG Project.

5. Legislative Action (FAA Sec. 611(a)(2)): If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, what is the basis for a reasonable expectation that such action

No legislative action is required in order for the project to proceed.

will be completed in time to permit orderly accomplishment of the purpose of the assistance?

6. Water Resources (FAA Sec. 611(b); FY 1993 Appropriations Act Sec. 501): If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)

N/A

7. Cash Transfer and Sector Assistance (FY 1993 Appropriations Act Sec. 571(b)): Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

N/A

8. Capital Assistance (FAA Sec. 611(e)): If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?

N/A

9. Multiple Country Objectives (FAA Sec. 601(a)): Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

N/A; This is not a Multilateral assistance project

10. U.S. Private Trade (FAA Sec. 601(b)): Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

See A,2,-above,

11. Local Currencies

a. Recipient Contributions (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

The Cooperating Country will contribute in cash or "in kind" the equivalent of upto \$100 million in additional equity, and at least \$500 million in local loan financing. Also there will be additional contributions against grant disbursements, as laid out in the US-Thai Development Partnership PP.

b. U.S.-Owned Currency (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

c. Separate Account (FY 1993 Appropriations Act Sec. 571). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

N/A

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

12. Trade Restrictions

a. Surplus Commodities (FY 1993 Appropriations Act Sec. 520(a)): If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

b. Textiles (Lautenberg Amendment) (FY 1993 Appropriations Act Sec. 520(c)): Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of

Assistance for a. Surplus Commodities or b. Textiles activities subject to these trade restrictions will be prohibited

textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

No

13. Tropical Forests (FY 1991 Appropriations Act Sec. 533(c)(3) (as referenced in section 532(d) of the FY 1993 Appropriations Act): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

No

14. PVO Assistance

a. Auditing and registration (FY 1993 Appropriations Act Sec. 536): If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

N/A

b. Funding sources (FY 1993 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"): If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

N/A

15. Project Agreement Documentation (State Authorization Sec. 139 (as interpreted by conference report)): Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

N/A. Since planned A.I.D. LOP funding is less than \$25 million, this reporting requirement is inapplicable at this time

137

16. Metric System (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

To the maximum extent feasible metric measurements will be included in procurements, grants and other project activities

17. Women in Development (FY 1993 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?

No specific project activities are directed at women-owned businesses, either in Thailand or in the U.S.; however, efforts will be made to ensure project activities are widely publicized so that interested women-owned businesses can participate.

18. Regional and Multilateral Assistance (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.

N/A

19. Abortions (FY 1993 Appropriations Act, Title II, under heading "Population, DA," and Sec. 524):

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No

b. Will any funds be used to lobby for abortion?

No

20. Cooperatives (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

N/A

21. U.S.-Owned Foreign Currencies

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1993 Appropriations Act Secs. 507, 509): Are steps being taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services.

N/A

b. Release of currencies (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

22. Procurement

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?

Limited procurement will take place; U.S. procurement will be fully advertised in accordance with A.I.D. policy

b. U.S. procurement (FAA Sec. 604(a) as amended by section 597 of the FY 1993 Appropriations Act): Will all procurement be from the U.S., the recipient country, or developing countries except as otherwise determined in accordance with the criteria of this section?

Yes

VA

c. Marine insurance (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

N/A

d. Non-U.S. agricultural procurement (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

N/A

e. Construction or engineering services (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

N/A

f. Cargo preference shipping (FAA Sec. 603)): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

No

g. Technical assistance (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the

Yes

facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

Yes

h. U.S. air carriers (International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

Yes

i. Termination for convenience of U.S. Government (FY 1993 Appropriations Act Sec. 504): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

Such a provision will be included in all A.I.D. direct contracts

j. Consulting services (FY 1993 Appropriations Act Sec. 523): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?

N/A

k. Metric conversion (Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest

To the maximum extent feasible, metric measurements will be included in all procurements, grants and other appropriate project activities.

documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

1. Competitive Selection Procedures (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

23. Construction

N/A. This is not a construction project

a. Capital project (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?

b. Construction contract (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

c. Large projects, Congressional approval (FAA Sec. 620(k)): If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress?

24. U.S. Audit Rights (FAA Sec. 301(d)): If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

N/A

25. Communist Assistance (FAA Sec. 620(h)). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

Yes

142

26. Narcotics

a. Cash reimbursements (FAA Sec. 483): Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated? Yes

b. Assistance to narcotics traffickers (FAA Sec. 487): Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance? Yes

27. Expropriation and Land Reform (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes

28. Police and Prisons (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

29. CIA Activities (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? Yes

30. Motor Vehicles (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

19-

31. Military Personnel (FY 1993 Appropriations Act Sec. 503): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes

32. Payment of U.N. Assessments (FY 1993 Appropriations Act Sec. 505): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes

33. Multilateral Organization Lending (FY 1993 Appropriations Act Sec. 506): Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes

34. Export of Nuclear Resources (FY 1993 Appropriations Act Sec. 510): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes

35. Repression of Population (FY 1993 Appropriations Act Sec. 511): Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? Yes

36. Publicity or Propaganda (FY 1993 Appropriations Act Sec. 516): Will assistance be used for publicity or propaganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propaganda purposes not authorized by Congress? No

37. Marine Insurance (FY 1993 Appropriations Act Sec. 560): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate?

Yes

38. Exchange for Prohibited Act (FY 1993 Appropriations Act Sec. 565): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

No

39. Commitment of Funds (FAA Sec. 635(h)): Does a contract or agreement entail a commitment for the expenditure of funds during a period in excess of 5 years from the date of the contract or agreement?

No

40. Impact on U.S. Jobs (FY 1993 Appropriations Act, Sec. 599):

(a) Will any financial incentive be provided to a business located in the U.S. for the purpose of inducing that business to relocate outside the U.S. in a manner that would likely reduce the number of U.S. employees of that business?

No. (See Annex L)

(b) Will assistance be provided for the purpose of establishing or developing an export processing zone or designated area in which the country's tax, tariff, labor, environment, and safety laws do not apply? If so, has the President determined and certified that such assistance is not likely to cause a loss of jobs within the U.S.?

No. (See Annex L)

145

(c) Will assistance be provided for a project or activity that contributes to the violation of internationally recognized workers rights, as defined in section 502(a)(4) of the Trade Act of 1974, of workers in the recipient country?

No.

B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. Agricultural Exports (Bumpers Amendment) (FY 1993 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?

N/A

2. Tied Aid Credits (FY 1993 Appropriations Act, Title II, under heading "Economic Support Fund"): Will DA funds be used for tied aid credits?

No

3. Appropriate Technology (FAA Sec. 107): Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

This project does not involve the provision of appropriate technology as so defined.

146

4. **Indigenous Needs and Resources (FAA Sec. 281(b)):** Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

This project will help the RTG address one of its priorities which is mobilization of investment to control pollution.

5. **Economic Development (FAA Sec. 101(a)):** Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes. The lack of basic infrastructure constrains business, both industry and tourism, as well as having negative effects on urban residents.

6. **Special Development Emphases (FAA Secs. 102(b), 113, 281(a)):** Describe extent to which activity will: (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

The Project will assist local governments become more self sufficient in addressing basic infrastructure needs, will involve NGOs and grass roots organizations in promoting environmental awareness, and will benefit low-income families equally and in some cases more directly than other urban households.

7. **Recipient Country Contribution (FAA Secs. 110, 124(d)):** Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

8. Benefit to Poor Majority (FAA Sec. 128(b)): If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

N/A

9. Abortions (FAA Sec. 104(f); FY 1993 Appropriations Act, Title II, under heading "Population, DA," and Sec. 534):

a. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

No

b. Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

No

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services?

N/A

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning?

N/A

f. Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to

N/A

148

methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization?

N/A

10. Contract Awards (FAA Sec. 601(e)): Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

11. Disadvantaged Enterprises (FY 1993 Appropriations Act Sec. 563): What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

Any contract issued under the project will require that 10% of all subcontracting activities be placed with such disadvantaged entities

12. Biological Diversity (FAA Sec. 119(g)): Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

N/A

13. Tropical Forests (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c) as referenced in section 532(d) of the FY 1993 Appropriations Act):

N/A

a. A.I.D. Regulation 16: Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16?

b. Conservation: Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation,

Yes. The Project will promote proper solid waste management, including recycling, as well as appropriate technologies for waste water treatment, e.g., wetlands for small communities.

and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all relevant U.S. government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?

c. Forest degradation: Will assistance be used for: (1) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas; (3) activities which would result in the conversion of forest lands to the rearing of livestock; (4) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (5) the colonization of forest lands; or (6) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

N/A

151

d. Sustainable forestry: If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?

N/A

e. Environmental impact statements: Will funds be made available in accordance with provisions of FAA Section 117(c) and applicable A.I.D. regulations requiring an environmental impact statement for activities significantly affecting the environment?

Yes

14. Energy (FY 1991 Appropriations Act Sec. 533(c) as referenced in section 532(d) of the FY 1993 Appropriations Act): If assistance relates to energy, will such assistance focus on: (a) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases?

N/A

15. Debt-for-Nature Exchange (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management.

N/A

16. Deobligation/Reobligation (FY 1993 Appropriations Act Sec. 515): If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as

N/A

152

originally obligated, and have the House and Senate Appropriations Committees been properly notified?

17. Loans

a. Repayment capacity (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

b. Long-range plans (FAA Sec. 122(b)): Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

c. Interest rate (FAA Sec. 122(b)): If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter?

d. Exports to United States (FAA Sec. 620(d)): If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

18. Development Objectives (FAA Secs. 102(a), 111, 113, 281(a)): Extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (2) help develop cooperatives, especially by technical

Under Credit Reform, the US Treasury determines credit risk for borrowers of guaranteed loans. Thailand is in a low risk category.

This Project will focus of 10-12 secondary cities, as well as Bangkok. These cities are regional economic Centers and provide a source of employment for a wide spectrum of income groups. es

150

assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?

19. Agriculture, Rural Development and Nutrition, and Agricultural Research (FAA Secs. 103 and 103A):

a. Rural poor and small farmers: If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor; or if assistance is being made available for agricultural research, has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made.

N/A

b. Nutrition: Describe extent to which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people.

N/A

c. Food security: Describe extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the

N/A

154

poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

20. Population and Health (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

N/A

21. Education and Human Resources Development (FAA Sec. 105): If assistance is being made available for education, public administration, or human resource development, describe (a) extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

N/A

22. Energy, Private Voluntary Organizations, and Selected Development Activities (FAA Sec. 106): If assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is:

a. concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of

N/A

155

research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment;

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

c. research into, and evaluation of, economic development processes and techniques;

d. reconstruction after natural or manmade disaster and programs of disaster preparedness; -----N/A.

e. for special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U.S. assistance;

f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development.

23. Capital Projects (Jobs Through Export Act of 1992, Secs. 303 and 306(d)): If assistance is being provided for a capital project, is the project developmentally sound and will the project measurably alleviate the worst manifestations of poverty or directly promote environmental safety and sustainability at the community level?

The partnership represents an advanced developing country strategy that will focus U.S. expertise, know-how and technology on critical Thai development issues

All activities will place emphasis on collaboration with the RTG in identifying critical development issues, prior to engaging U.S. expertise and seeking tangible outputs.

The Partnership will support U.S.-Thai transactions addressing Thai development issues; creating Thai institutional capability; engaging U.S. knowhow, expertise and technology; leveraging non-USAID funding; and defining sources of future revenue.

With respect to U.S.-Thai linkages on critical Thai environmental issues of waste water management and waste collection and disposal, these activities will take place mainly in the secondary and smaller cities.

N/A

C. CRITERIA APPLICABLE TO ECONOMIC SUPPORT FUNDS ONLY

1. Economic and Political Stability (FAA Sec. 531(a)): Will this assistance promote economic and political stability?

N/A

To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

2. Military Purposes (FAA Sec. 531(e)): Will this assistance be used for military or paramilitary purposes?

N/A

3. Commodity Grants/Separate Accounts (FAA Sec. 609): If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made? (For FY 1993, this provision is superseded by the separate account requirements of FY 1993 Appropriations Act Sec. 571(a), see Sec. 571(a)(5).)

N/A

4. Generation and Use of Local Currencies (FAA Sec. 531(d)): Will ESF funds made available for commodity import programs or other program assistance be used to generate local currencies? If so, will at least 50 percent of such local currencies be available to support activities consistent with the objectives of FAA sections 103 through 106? (For FY 1993, this provision is superseded by the separate account requirements of FY 1993 Appropriations Act Sec. 571(a), see Sec. 571(a)(5).)

N/A

5. Cash Transfer Requirements (FY 1993 Appropriations Act, Title II, under heading "Economic Support Fund," and Sec. 571(b)). If assistance is in the form of a cash transfer:

N/A

a. Separate account: Are all such cash payments to be maintained by the country in a separate account and not to be commingled with any other funds?

N/A

b. Local currencies: Will all local currencies that may be generated with funds provided as a cash transfer to such a country also be deposited in a special account, and has A.I.D. entered into an agreement with that government setting forth the amount of the local currencies to be generated, the terms and

N/A

157

conditions under which they are to be used, and the responsibilities of A.I.D. and that government to monitor and account for deposits and disbursements?

c. U.S. Government use of local currencies: Will all such local currencies also be made available to the U.S. government as the U.S. determines necessary for the requirements of the U.S. Government, or to carry out development assistance (including DFA) or ESF purposes?

N/A

d. Congressional notice: Has Congress received prior notification providing in detail how the funds will be used, including the U.S. interests that will be served by the assistance, and, as appropriate, the economic policy reforms that will be promoted by the cash transfer assistance?

N/A

6. Capital Projects (Jobs Through Exports Act of 1992, Sec. 306, FY 1993 Appropriations Act, Sec. 595): If assistance is being provided for a capital project, will the project be developmentally-sound and sustainable, i.e., one that is (a) environmentally sustainable, (b) within the financial capacity of the government or recipient to maintain from its own resources, and (c) responsive to a significant development priority initiated by the country to which assistance is being provided. (Please note the definition of "capital project" contained in section 595 of the FY 1993 Appropriations Act.)

N/A

REUSE



No. 1008/Δ571

Office of the National Economic
and Social Development Board,
962 Krung Kasem Road,
Bangkok 10100.

24.

September 7, 1993

Dear Sir,

Re : Guaranty Facility for Urban Environmental Infrastructure

Reference is made to your letter dated 17th June in which USAID has kindly proposed to create a Guaranty Facility for Municipal Infrastructure Loans.

Please be informed that after consultation with concerned governmental agencies on the subject, it is agreed upon that the proposal should be further explored and NESDB can assure you of our collaboration in the Project's feasibility study phase.

With my best regards.

Yours Sincerely,

(PHISIT PAKKASEM)
SECRETARY GENERAL

NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT BOARD

RECEIVED	
SEP 13 1993	
ACT	INFO
	D
	DD
	RLA
	EXO
	FIN
	PSP
	TR
	PDE
	RP
✓	RHULO
	ASE/AN
	OTFC
	CAIT
DUE DATE SEP 21	
ACTION TAKEN	
INITIAL	
DATE	

Thomas H. Reese, III
Mission Director
USAID



159