

TCR:THA 26430

ASIAN DEVELOPMENT BANK

TECHNICAL ASSISTANCE COMPLETION REPORT

OF THE

PRIVATIZATION OF WATER SUPPLY OPERATIONS

(TA NO. 1907-THA)

IN THE

KINGDOM OF THAILAND

June 1995

CURRENCY EQUIVALENTS
(as of 31 May 1995)

Currency Unit	-	Baht (B)
B1.00	=	\$0.040667
\$1.00	=	B24.59

At Approval

B1.00	=	\$0.03979
\$1.00	=	B25.13

At Completion

B1.00	=	\$0.03992
\$1.00	=	B25.05

The baht is allowed to float against a weighted basket of currencies of the country's major trading partners.

ABBREVIATIONS

BOT	build, operate, transfer
PWA	Provincial Waterworks Authority
TA	Technical Assistance

NOTES

- (i) The fiscal year of the Government ends on 30 September.
- (ii) In this Report, "\$" refers to US dollars.

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Note: This report was prepared by J. W. Evans, Senior Project Specialist (Environment) and is based on the materials available in the Bank.

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(i)

BASIC DATA

TA TITLE : PRIVATIZATION OF WATER SUPPLY OPERATIONS

TA NUMBER : 1907-THA

IMPLEMENTING DIVISION : Water Supply, Urban Development, and Housing Division,
Agriculture and Social Sectors Department (West)

RECIPIENT AGENCY : Provincial Waterworks Authority
Kingdom of Thailand

KEY DATES	Expected	Actual
President's Approval	July 1993	02 July 1993
Signing of Consultant's Contract	November 1993	26 November 1993
TA Completion	May 1994	20 November 1994

CONTRACTED CONSULTANT PERSON-MONTHS

Expertise	Contracted Person-months Expected	Actual
International		
Privatization Specialist (Team Leader)	2.75	3.75
Water Supply Planner	2.75	2.81
Environmental Specialist	0.50	0.50
Economist/Financial Analyst	0.75	0.75
Legal Expert	<u>0.75</u>	<u>0.75</u>
Subtotal	7.50	8.56
Local		
Legal Expert	0.75	0.75
Economist	1.25	1.25
Water Supply Planner	1.75	1.75
Financial Analyst	<u>1.50</u>	<u>1.50</u>
Subtotal	5.25	5.25
Total	12.75	13.81

TRAINING PROGRAM IMPLEMENTED

Title of Program	Dates	No of. Participants
External Training on Water Supply Privatization in Australia	13-20 November 1994	7

(ii)

MISSION DATA

Type of Mission	Dates
Fact-Finding Mission	1-19 March 1993
Review Mission ^a	15-16 February 1994
Review Mission ^b	27-28 June 1994

TA COST ESTIMATE

Item	Cost (\$)		
	Foreign	Local	Total
Bank Financing	256,000	61,000	317,000
Government Financing	-	41,000	41,000
Total	256,000	102,000	357,000
ACTUAL COST INCURRED^c	263,401	52,640	316,041

^a In conjunction with the ESCAP Consultation Mission.

^b In conjunction with the Country Program Consultation Mission.

^c This figure refers to the actual cost incurred from the TA fund.

I. BACKGROUND AND OBJECTIVES

A. Background

1. The economy in Thailand is growing rapidly and, combined with population trends, now faces enormous demands on its infrastructure, including water supply utilities. The competing demands on limited Government finances, and the need for improved efficiency in management, suggest that the private sector needs to make a major contribution to water sector developments, if demand is to be matched by an adequate supply of quality water services. The responsibility for management of water resources in Thailand is shared among several Government agencies. The Provincial Waterworks Authority (PWA) has primary responsibility for the supply of drinking water to most regions in Thailand except for Bangkok, which is supplied by the Metropolitan Waterworks Authority. The Government has made a policy decision to privatize water supply wherever feasible, in recognition of difficulty of the Government generating sufficient revenue to meet the infrastructure development needs in the future and in recognition of the role of the private sector in Thailand's rapid economic development.

B. Rationale and Objectives of the Technical Assistance

2. The technical assistance (TA) was designed to assist the Government in implementing its policy of privatization of the water supply sector, by preparing proposals for privatization of selected PWA operations and recommendations for strengthening the policy and regulatory framework for the sector. The areas selected for study, Phuket and Patum Thani, are both experiencing rapid growth in demand and severe shortages of water and have the potential for privatization because the largest consumers in these areas are industrial and resort owners.

II. IMPLEMENTATION AND INPUTS

A. Concept and Approach

3. The necessary experience and expertise on privatization of water supplies is not available in Thailand. Thus, consulting services were provided to review laws and regulations related to privatization; identify private sector investors and financiers interested in private water supply; review and update the master plans and feasibility studies for Phuket and Patum Thani; prepare immediate-action proposals for these two areas and medium-term (10-year) action plans for privatization; prepare recommended terms, conditions, implementation arrangements, and justifications for immediate-action proposals; prepare the necessary environmental and social examinations and impact assessments; recommend policy incentives and a regulatory framework; and help PWA prepare for implementation. In addition, the consultant planned and supervised a carefully-focussed overseas training for senior officials of PWA and other agencies involved in privatization of water supplies consisting of visits to water utilities in Australia to study successful private sector water supply operations.

B. Terms of Reference

4. The TA required the services of five international consultants with expertise in privatization, water supply planning, environmental planning, economics, and finance, and four

local consultants with expertise in legal aspects of privatization, water supply engineering, economics, and finance. The consultants were able to effectively deliver their services in accordance with the terms of reference.

C. Physical Inputs

5. Under the TA, one personal computer and one printer were provided. These were procured by the consultant and used during the course of the TA, and were turned over to the Government after completion of the TA.

D. Engagement of Consultants

6. A consulting firm was recruited in accordance with the Bank's *Guidelines on the Use of Consultants*. An Australian firm, in association with two other Australian firms and one in Thailand, was selected from six shortlisted firms. The consultant team consisted of five foreign consultants with a total input of 8.56 person-months and four local consultants with a total input of 5.25 person-months. No particular problems were encountered during the consultant recruitment phase.

E. Implementation Schedule and Financing Arrangements

7. The TA contract was signed on 26 November 1993. The notice to proceed was issued to the consultant on 7 December 1993, and fieldwork commenced on 13 December 1993. The consultant's assignment was originally scheduled to be carried out over a period of five months with completion by May 1994. However the consultant's assignment was extended until November 1994 in order to complete the external training.

8. The TA was estimated to cost \$358,000, of which \$317,000 was to be financed by the Bank on a grant basis. The balance was to be provided in kind by PWA in the form of counterpart staff, office accommodation with communication facilities, materials, and supplies. The actual cost of the TA funded by the Bank totaled \$316,041.

F. Supervision

1. Bank

9. The TA was adequately supervised by the Bank through Review Missions. The Bank Missions from 15 to 16 February 1994 and from 27 to 28 June 1994 reviewed the progress of the TA and held discussions with the consultants and Government officials. The reviews by the Bank were thorough, addressed the issues raised by the consultants and PWA, and provided appropriate advice to the consultants.

2. Recipient Agency

10. In addition to the day-to-day interaction of PWA counterparts with the consultant, the management of PWA organized in-house workshops to discuss the consultant's report. The review of the draft final report was very thorough, but took almost three months because of the involvement of a large number of staff from PWA and other Government agencies.

III. EVALUATION OF OUTPUTS

A. Quality of Reports and Services Provided

11. The consultant provided effective professional services and timely reports throughout the TA. The reports were of high quality and the final report was well-structured, thoroughly documented, and addressed the immediate and long-term water supply privatization issues. The consultant's efforts to tailor the report and the external training to meet PWA needs were appreciated by the Government.

B. Training

12. In addition to on-the-job training at PWA, the consultant organized a study tour in Sydney, Melbourne and Newcastle (Hunter Water Corporation), Australia to observe and review the different types and stages of restructuring that different water utilities have undergone. The seven participants from the Government included: the Inspector General of the Ministry of Finance, an urban development expert from the National Economic and Social Development Board, and one Deputy Governor, three Directors, and the Senior Administrator of PWA, all of whom are responsible for organizing and supervising the Government's water supply privatization efforts. The participants met with their counterparts in the Australian Government including the Government Minister of Victoria and chief executive officers of water sector institutions and companies in Australia engaged in restructuring and privatization issues. The exposure to Australia's experience with privatization was an important type of training that subsequently enhanced the ability of the Government to initiate the privatization of the water supply systems of PWA.

C. Feasibility Planning

13. In accordance with the terms of reference, the consultants evaluated and updated feasibility studies for the Patum Thani and Phuket water works expansions. Indicative investment plans, project cost estimates and tender documentation for privatization of the two systems were prepared. The draft tender documents for Patum Thani have been used by PWA for tendering Thailand's first attempt at large scale water supply development by the private sector.

D. Institution Building

14. The TA Report recommended measures to strengthen the water resources sector institutions in line with the scope of services (summarized in para 3). Two fundamental recommendations covered (i) the enactment of strengthened water resources management regulations and (ii) an improvement in the procedures for the design of privatization projects and the selection of private sector operators. The Government is considering new water resource management regulations, although this is a sensitive issue that may take time to resolve because of the numerous institutions involved in the sector. With regards to guidance on privatization policies, plans and procedures, the TA resulted in the following key recommendations: (a) that all water supply authorities in Thailand be required to operate on a sustainable commercial basis and the Government support the principle that water services be provided by corporations that are subject to normal commercial and legal practices; (b) that the principal assets of the water

sector remain under public ownership, unless clear long-term benefits can be shown to result from private ownership; (c) that new capital assets, where appropriate, be built and operated by the private sector and transferred to the Government at the end of an agreed contract period, unless it can be demonstrated that there are significant net benefits from retaining the newly constructed assets in private ownership; (d) that all water supply authorities be required to charge tariffs for connection, water use, excess water use, and other services on a full cost recovery basis, including capital costs; (e) that, where appropriate, water supply authorities be required to contract out such services as meter reading and collection, engineering design and construction services, and other activities, on a competitive and commercial basis; (f) that the preferred form of privatization generally is a retail water concession, that is, the provision of water services from raw water pumping and treatment to delivery and billing of the final customer will be managed by the private sector; and (g) as a transitional policy, where there are significant obstacles to private water concessions that build, operate, transfer (BOT) contracts for raw water delivery and treatment, and contracts for construction and management of water reticulation schemes be an alternative option. The nature and financial conditions of these BOTs should not preclude the establishment of a private water concession at a later date.

E. Consultant's Performance

15. The expertise provided and the overall performance of the consultants were satisfactory. The policy, institutional, and strategic recommendations related to privatization of water supply are particularly relevant. The relations with PWA were cordial. The consultants' performance was commendable.

IV. CONCLUSION

A. Overall Assessment

16. The output of the TA in relation to the terms of reference was fully satisfactory. The TA has provided critically needed guidance to the Government on privatization of water supply systems. The recommendations presented in the final report of the TA have been carefully reviewed by the Government and selectively implemented in support of its first attempts at privatization of water supply systems. Many recommendations resulting from the TA are being considered by PWA and other agencies and are expected to be implemented over the next few years as PWA and the Government gain first-hand experience in privatization and as water becomes a scarce commodity. Since the completion of the TA, PWA has secured bids for privatization of two waterworks and is in the process of letting bids for a third waterworks. After reviewing and discussing the TA recommendations, PWA decided to use the BOT approach for the first project in which the private sector will sell bulk water to PWA. The evaluation of bids so far indicates that the bulk water tariffs will be affordable. The second project followed the recommendation to privatize retail water concessions. Preliminary analysis indicates that the required increase in tariff may not be affordable. As PWA gains experience in the privatization process, it will be able to adapt the TA recommendations to suit Thailand's requirements. It is very clear that the TA was instrumental in facilitating the initiation of the privatization process for selected waterworks of PWA.

B. Lessons Learned

17. The successful implementation of the TA and the events in Thailand subsequent to the completion of the TA provided some useful lessons that should help in the formulation and implementation of similar TAs in the future. The TA was designed to assist the Government in making policy and planning decisions at the critical, initial stage of privatizing selected water supply systems. The formulation of the TA including the rationale, objectives, and terms of reference was appropriate and the TA objectives were fulfilled. PWA could not have initiated privatization, in a timely manner, without the information about the alternative approaches and consequences obtained from the TA. This information was crucial for PWA to make policy and planning decisions and to establish the level of credibility that was required to attract bidders for the privatization of PWA systems. As a result of the TA, PWA was able to make informed decisions on privatization, but they were not as well-prepared to carry out the task of evaluating privatization proposals. Substantial long-term, on-the-job training and advisory assistance could have facilitated the implementation of the privatization process. Such capacity building will require expert advisory inputs for a long time.

18. The other key lesson learned relates to the need to integrate fully engineering and financial aspects with policy and institutional issues analyses when working with engineering-oriented agencies. Finding the appropriate balance is often only possible after mobilization of TA consultants, which means that the Bank should retain flexibility in the administration of TAs so that necessary adjustments to the inputs of consultants can be made, as was done in this TA. This will optimize the benefits of the TA and meet the counterpart agency needs.

C. Follow-Up Actions and Recommendations

19. The Government has embarked on a progressive program of privatization of water supply systems. The Bank should continue to support this effort in the water supply sector by considering additional TA for capacity building for privatization of water supply systems and by incorporating an analysis of privatization as a component of project preparatory TAs for water supply projects. Similar efforts may be appropriate in the related sectors of urban wastewater management, urban solid waste management, and hazardous waste management.