CLASSIFICATION

PROJECT EVALUATION SUMMARY (PES) – PART I

Report Symbol U-447

1. PROJECT TITLE	2. PROJECT NUMBER	3. MISSION/AID/W OFFICE
4920309001601	492-0309	USAID/Philippines
LOCAL WATER DEVELOPMENT I	4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) 4920309 (3)	
	☒ REGULAR EVALUATION ☐ SPECIAL EVALUATION	

5. KEY PROJECT IMPLEMENTATION DATES			6. ESTIMATED PROJECT FUNDING	7. PERIOD COVERED BY EVALUATION
A. First PRO-AG or Equivalent FY 76	B. Final Obligation Expected FY 79	C. Final Input Delivery FY 81	A. Total $ 40.0 M	From (month/yr.) August, 1976
			B. U.S. $ 21.0 M	To (month/yr.) January, 1979
				Date of Evaluation Review February, 1979

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

10p.

PD-AAD-585-A1

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIO, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
USAID will send a copy of this evaluation to LWUA and by letter make the following recommendations: 1) that LWUA continue in its search for ways to shorten the process that occurs prior to construction of water systems. The possibility of opening Letters of Credit earlier and ordering such offshore commodities as valves and fittings in advance of construction should be explored. 2) that LWUA investigate means by which customs clearance can be expedited. 3) that LWUA continue to place high priority on its public information/relations program in order to address potential opposition to increased water rates and to insure greater user support and understanding.	W.F. McDonald	April 30, 1979

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS			10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT
☐ Project Paper	☐ Implementation Plan e.g., CPI Network	☐ Other (Specify)	A. ☒ Continue Project Without Change
☐ Financial Plan	☐ PIO/T		B. ☐ Change Project Design and/or
☐ Logical Framework	☐ PIO/C	☐ Other (Specify)	☐ Change Implementation Plan
☐ Project Agreement	☐ PIO/P		C. ☐ Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles)

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Hermilo S. Balucan, Chief
Research and Evaluation
Unit, LWUA

Clearances:
PO: FJYoung (draft)
OD: DPBarrett

12. Mission/AID/W Office Director Approval

Signature

Typed Name: Peter M. Cody
Director

Date: 23 MAR 1979

AID 1330-15 (3-78)

PROJECT EVALUATION SUMMARY (PES)--PART II

13. SUMMARY

This is the fourth phase of a total provincial water program in which AID has had active involvement. In 1974, a loan of $15.0 million helped establish the Local Water Utilities Administration (LWUA) at the national level and water districts at the local level. AID financed the prefeasibility studies from which the concept of a national institution providing financing, training, standards, and regulations to local independent water districts emerged. The Local Water Development Project is a loan for $20.0 million to assist financing systems in from 55 to 60 cities with populations of approximately thirty to sixty thousand people and a $1.0 million grant for institutional development.

The immediate objectives of the project are to provide reliable service and safe water to provincial residents and to develop the institutional capacity of both LWUA and the local water districts. LWUA calls this project an Interim Demonstration Program and describes it as a first stage, "high impact" effort in which only the major defects of a waterworks system are corrected and the district management assisted to put the system on a sound, businesslike basis. Forty-six water districts have been identified for the AID portion of this program. Twenty-two feasibility studies are complete and nineteen water districts are under design for construction/improvement. The LWUA Training Center, located in Quezon City, is under construction and scheduled for completion June 30, 1979.

In the Project Construction Phase, three waterworks systems are under construction/improvement in three cities: Urdaneta, Silay, and Gapan. Estimated dates for completion are: Urdaneta: March 31, 1979, Silay: April 30, 1979, and Gapan: June 30, 1979.

In the Project Bidding Phase, bids have been awarded on the construction of three water systems: Calamba, Bangued, and San Fernando. In late December of 1978, twelve additional water districts were assigned to the project.

Based on cost data accumulated to date, approximately ₱34.0 million ($4,607,046) of the total amount available for the project is under award or signed contract. Of this amount, approximately ₱10.5 million ($1,422,764) has been actually expended.

According to the implementation plan in the project paper, the project is considerably behind schedule. Delays include:

1. drilling of test wells to confirm proposed sources of supply -- In at least five water districts, the water source is uncertain and a test well must be drilled before a feasibility study can be written.

2. a smaller average investment per project than originally envisioned -- This has been necessary to keep each project within the ability and willingness of people to repay the loans, but has resulted in an increase from the proposed 35-40 districts to approximately 60 districts necessary to expend loan funds. The number of water districts ultimately constructed/improved will depend upon funds available.

3. institutional development of some districts slower than anticipated.

4. numerous small districts assigned to the program -- Each of these requires almost the same time and effort to complete as a much larger district.

5. bid evaluation and approval of contract awards by all necessary governmental agencies slower than anticipated.

6. the wait for offshore procurement commodities -- In Urdaneta and Gapan, for example, construction of the distribution systems is pending the delivery of such commodities as valves, fittings, and pumps.

In view of the above, it may be necessary to extend the terminal date of disbursement beyond the current TDD of March 31, 1981 in order to expend loan funds. However, a final decision will be made at a later date when actual progress can be more fully assessed.

As to institutional development, LWUA is regarded as a healthy, viable organization. International donors include Denmark (DANIDA), the Asian Development Bank (ADB), and the World Bank (IBRD). The World Bank has offered to lend an additional $30.0 million for water development. The question does not appear to be one of money, but of how to spend that money wisely. Total aspects of institutional development require time and can delay project completion, yet LWUA would be ill advised to borrow without providing the proper training in the provinces that increases readiness for this kind of project and assures repayment.

The institutional capabilities of LWUA and the local water districts remain the key to continued development and progress of the program. For this reason, AID has encouraged the use of and is financing a rather large component of U.S. consultancy service to LWUA for the life of the project. Local institutions depend heavily on LWUA for their individual development with LWUA providing policy and technical assistance. Whether or not water systems can be undertaken and completed is absolutely dependent upon a functioning delivery system and the capacity of personnel to sustain that system. It is still believed that at the end of this project, LWUA will be able to carry on all of its functions without assistance from foreign consultants and continue expansion of the program.

14. EVALUATION METHODOLOGY

This is a regular evaluation conducted by the Project Officer, the Social Sciences Advisor, the Water Resources Advisor, other staff members from the Office of Capital Development, and individuals from LWUA. Assistance was also provided by the Program Office in the form of comments and suggestions. The evaluation consisted of a review of all available documents and correspondence plus interviews with appropriate personnel from the consulting firm of James M. Montgomery (JMM). The logical framework was employed as an aid to assess progress toward project purpose and goal. A site visitation to Urdaneta in which evaluators talked with water district personnel and a tour of the LWUA Training Center with the project manager of JMM were made. Evaluation of the water program by LWUA and the Institute of Philippine Culture is an ongoing activity in the five pilot projects financed under the Provincial Water Project (AID Loan No. 492-U-033). The preliminary findings relate to health benefits and economic development from that evaluation were employed and thought to apply to this project as well. Those findings are discussed in Item 20, Beneficiaries.

15. EXTERNAL FACTORS

None

16. INPUTS

AID's input is a $20.0 million loan for the construction/improvement of provincial waterworks systems and a $1.0 million grant for institutional

development. Of the $20.0 million loan, obligated one-half in FY 1976 and one-half in FY 1977, approximately $3.0 million will be used to finance U.S. consultant services. If the total amount of $3.0 million is not required for this purpose, the remaining portion will be used for the improvement/construction of additional waterworks systems. One hundred thousand dollars is allocated for commodities in the water analysis and training laboratory and $100,000 for specialized participant training. The balance of the $20.0 million, i.e. $16.8 million, is financing the foreign exchange requirements of the subprojects and partially reimbursing the GOP for local currency costs of the subprojects. The GOP is contributing a minimum of 50% of the total project cost.

Under this loan, AID is financing the services of James M. Montgomery, Consulting Engineers, Inc. Personnel from JMM (15) are divided into two groups: a Technical Section that provides general engineering services and an Institutional Section that advises both the national agency and local water districts on accounting, management, operation, and maintenance.

LWUA/JMM's contract stresses training, the major part of which is the training in which a JMM engineer is counterparted with a LWUA water district advisor. However, even those consultants assigned to the Technical Section and working in the Engineering Design Division of LWUA are there to develop the capability of local employees to perform in sanitary engineering. Since 1973, LWUA has conducted 82 separate training programs involving 2,351 participants. Their Management Training Program consists of seminars in administration, commercial practice systems, and operating a utility. Participant training in the United States has taken place in such specialized fields as hydrogeology, hydraulics, pumping systems, and waste water engineering. The Training Center, scheduled for completion in June of this year, will include a water analysis laboratory, chlorination room, pipe yard, pump room, library, and classrooms.

17. OUTPUTS

Project outputs are: (1) the improvement/construction of waterworks systems, (2) trained LWUA personnel, and (3) a waterworks training center.

The three previously discussed water systems: Urdaneta, Silay, and Gapan, and the Training Center are scheduled for completion within a matter of months.

One of the delays encountered by the project is the fact that until the feasibility study and design of each waterworks system are virtually complete, requests for proposals for bids cannot be made and offshore procurement cannot be initiated. This results in a lag of several months between the time that construction is ready to begin until it actually can begin. For example, the system in Urdaneta: the plans and specifications were issued and the job advertised on October 17, 1977. The bid opening was December 7, 1977. Notice of award was made January 11, 1978. USAID approved the award on January 23, 1978, and the contract was signed February 10, 1978. At this point in the procedure, the contract must then go to the Ministry of Public Works or, depending upon its size, to the Office of the President for review and approval. When approved, a Notice to Proceed is issued. In the case of Urdaneta, the Notice to Proceed was issued on May 8, 1978 -- a delay of about four months. The lag for Gapan was five months; for Silay four months. The Calamba contract was signed on July 26, 1978, but no Notice to Proceed has yet been issued. If bid evaluation, approval of contract awards, and procurement could be made in a more timely fashion, then the commodities could arrive at the site shortly after the contractor has been given notice to proceed and construction could begin.

Another reason for delay in the Urdaneta system has been the excessive amount of time offshore procurement commodities were required to remain in customs. LWUA's resident engineer for the Urdaneta project reported that an order of pipe that arrived in port this September was only this month released from customs. This is because that same kind of pipe is manufactured locally and the GOP requires that justification be submitted for its importation. Both JMM and USAID engineers have recommended that the contractor be aware of this requirement when he elects to import and at that time, in advance of its arrival in country, prepare his justification for offshore procurement.

The LWUA/JMM contract indicates the importance placed on institution building. LWUA began in 1973 with four employees. At that time, most cities had water from only two to six hours a day and in some cities only 20% of the population was receiving water. Service had deteriorated, the water was unsafe, and revenues were insufficient to meet operating costs. Today LWUA has 440 employees and more than

80 water districts formed and filed. Seventy-two of these districts have Conditional Certificates of Conformance. LWUA is recognized as an organization with the capacity to undertake and complete projects.

Making a water district self-sufficient and self-supporting is a major undertaking. The public, long accustomed to government subsidy, must now be re-oriented and re-educated. In both Olongapo and Bangued there has been opposition to the increase in water rates. It is noted, however, that the majority of such opposition comes from middle and higher income beneficiaries. The lower income beneficiaries are receiving a higher quality of water and service at lower rates than when they patronized the water sellers. It is also noted that as of December 31, 1978, LWUA's repayment efficiency on the loan principals was 74% whereas several years ago most water districts could not meet their operating costs, much less pay for their loan amortizations. Nonetheless, LWUA needs to continue strengthening its public relations program to insure greater user support and understanding.

18. PURPOSE

The purpose of the Local Water Development project is to continue in the institutional development of LWUA and local water districts and to assist construction/improvement of selected small waterworks systems under a high impact program. Although implementation is proceeding more slowly than planned, the EOPS conditions are still considered a good description of what will exist when purpose is achieved. Various projects have started and stopped, but what is being built is viable. What should be done at this time is what is being done -- improved service at minimal cost. Construction/improvement is slower than anticipated, but institutional development is quite satisfactory. The Training Center, for example, is not a water district, but it does represent institutional development.

19. GOAL/SUBGOAL

The AID-financed prefeasibility and comprehensive feasibility studies on over 125 provincial communities indicate that community waterworks systems in the Philippines are inadequate and unsafe. The goal of this project is better health in selected provincial communities and an improvement in the quality of life there. While it has been

universally recognized that an improved water system will have a favorable impact on health, it has been equally evident that the improved water system is an essential part of the community's economic development. In addition to the potential increase in productivity as a result of less illness and longer life, the improved water system is expected to facilitate commercial and industrial development. While it is too early for businesses to have started up as a result of this project, commercial enterprises have expressed interest and the assumption that accelerated development will occur along water lines remains valid. The project has influenced Filipino manufacturers to start producing pipe and water meters. LWUA now buys all water meters locally and although the program previously imported PVC pipe, local manufacturers are now supplying it. Three years ago, neither water meters nor this pipe was available in the Philippines.

20. BENEFICIARIES

To determine the socioeconomic status of the Provincial Water Project's beneficiaries, a study undertaken in 1976 is being conducted by the Institute of Philippine Culture. The initial results indicate that the cities involved in this project have substantial proportions of their populations in the lower social and economic categories. The AID-assisted study has involved considerable field work and the completion of questionnaires by a randomly selected group of users. The questionnaires have all been completed and in February, 1979, the last lot was sent to the United States. All of the data will be put on computer tapes and subsequently available for analyses. Although this study applies only to the Provincial Water Project, it is expected to provide considerable detail on the socioeconomic conditions of the beneficiaries of this project as well.

The most important benefit this program offers is improved health. Although this cannot be easily quantified in the short run, public health officials contend that the provision of safer water is of prime importance to public health and, in combination with other sanitary measures, an essential prerequisite to eradicating endemic diseases.

At the community level, a good water supply is one among many infrastructure components--roads, schools, markets--and essential for development. In urban areas, no satisfactory alternative to a public water system exists. While it is still too early to measure this

project's progress, the improved and expanded water systems are expected to provide one of the essential elements for commercial and industrial development. One of the purposes of this project is to facilitate in a relatively short time the type of industry that requires a large quantity of quality water. Such industries are food processors, ice plants, and bottling companies. It is expected that these development opportunities will occur in some communities prior to the end of the project.

An indication of LWUA's concern for beneficiary analysis is evidenced by the recent creation of a permanent evaluation staff within the organization. The senior LWUA official responsible for this function recently spent thirty days TDY in Washington where he worked closely with the U.S. Bureau of Census RSSA team. Via TDY's to the Philippines, Bureau of Census staff members are continuing to assist LWUA in the development of its inhouse evaluation capabilities.

21. UNPLANNED EFFECTS

In conjunction with this project, LWUA has influenced the way people use water. Through PL 480 funding, the Olongapo Water District purchased and installed some 5,000 water meters and began metering the water. Previous to this, the municipality simply charged the users a fixed rate and allowed them an unlimited amount of water. Because of extravagant use, however, the water was available for only a limited number of hours per day. Since Olongapo began metering the water and charging accordingly, people have begun conserving water, thereby reducing the shortage and making water now available on a twenty-four hour basis. This is an indication of what might be expected to occur as other cities begin metering water and users become more "water conscious."

For certain classes of users, water rates have increased. The experience of the Davao City Water District, however, is that it is not likely to be the small, low income homeowners who will feel the pinch of an increase in water rates. In Davao, the commercial and industrial establishments pay monthly minimum and commodity charges double that of residential and government users. Also, the Davao system is capable of providing sufficient water for drinking, washing, and other sanitary needs at a cost which is less than the sole purchase of drinking water from vendors. Still, while the rates

charged to residential consumers are in fact less than the amount they would pay vendors, residential consumers initially may regard the rates as high and complain. There are several reasons for this:

1) water use. Conservation of water is one of the most serious problems which water districts face. Because many residents utilize rivers or illegal connections onto water mains to supplement drinking water, they become accustomed to profligate water use. This shows up when all water is coursed through a meter.

2) previously subsidized rates or low flat fee rates. These have also had an effect on water use habits. People have become accustomed to using water without paying for its true cost to the system.

3) monthly billing. People appear to be more willing and able to pay for water on a daily cash basis than to budget for a lump sum payment at the end of the month.

4) underground leaks. Under a flat fee or subsidized system, the effects of underground water leaks within the houseowner's property have little impact on water bills. When metered, however, the impact is substantial.

5) illegal connections. Until these are located and remedied, everyone must share the cost of water lost through the system via illegal connections.

22. LESSONS LEARNED

LWUA has seen that in order to properly prepare people for a self-supporting water district and educate them on the concept of paying for water, they must increase their program of public information to the point of an almost massive campaign. They now go into each barangay in the district and present the proposal three times: once during the feasibility study, once during the design, and last just prior to construction. They tell the prospective users what their rates will be, how the system will work, and what they can expect.

23. SPECIAL COMMENTS OR REMARKS

This evaluation has confirmed that LWUA is a well organized, competently staffed institution and, notwithstanding the delays and some of the minor problems herein noted, is implementing the project efficiently.