PD-ABS-366

MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE

PROJECT PAPER

(PROJECT 497-HG-006)

MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE

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ANNEX A

LOGICAL FRAMEWORK

Municipal Finance for Environmental Infrastructure

LOGICAL FRAMEWORK

Project Title: Municipal Finance for Environmental Infrastructure

02/10/93

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
PROJECT GOAL : THE BROADER OBJECTIVE TO WHICH THE PROJECT CONTRIBUTES			
	Measures of Goal Achievement		Assumptions for achieving goal targets :
1. Broaden access to basic services by facilitating the delivery of urban environmental infrastructure on a financially viable and sustainable basis.	1.1 An increase in the total level of investment in shelter-related environmental infrastructure.	1.1 Urban investment data as maintained by Cipta Karya and the SIKD information system developed under MFP.	1.1.1 Increase in HG resources are not off-set by decrease in GOI and other donor investments. 1.1.2 Other major donors (World Bank and ADB) will support the project purpose.
	1.2 Increase in the total population served by urban environmental infrastructure and services (water, waste water, and solid waste management).	1.2 BAPPENAS reports on progress of urban sector planning/investment and IUIDP process.	
	1.3 Extension of the benefits of environmental investment to the urban below-median-income population	1.3 Special household and related surveys to measure income distribution of service coverage from environmental investments.	1.3 Governmental investments will be more highly targeted on the urban poor.
PROJECT PURPOSE	EOPS :		
2. Assist the GOI to adopt an enabling framework for integrating urban environmental management within a system of improved, decentralized municipal finance and planning.	2.1. Increased share of central-local transfer payments under local government discretionary authority, as indicated by:		2.1 The GOI will continue to shift responsibility for the financing and planning of urban services/infrastructure to local government.
	2.1.1 An increased share of INPRES grants in total capital transfers from the central government to local governments, from the current 23% (91/92) to an EOPS of 30%	2.1.1 MFP Monitoring Indicators.	
	2.1.2 An increased district/municipality share of central government grants to local governments from the current 52% (91/92) to an EOPS of 60%.	2.1.2 MFP Monitoring Indicators	
	2.2. Improved performance of local governments in resource mobilization, as indicated by:		
	2.2.1 A continued year-on-year increase in real per capita own source revenues.	2.2.1 MFP Monitoring Indicators.	
	2.2.2 An increased share of user charges in local government own resource revenues, from 19% (1989/90) to an EOPS of 25%.	2.2.2 MFP Monitoring Indicators.	
	2.2.3 An increased share of property taxes in own source revenues, from 26% (1989/90) to an EOPS of 30%.	2.2.3 MFP Monitoring Indicators.	
	2.3. The private sector participates in a growing volume of environmental infrastructure investment and service delivery, as indicated by an increase in the value of non-housing urban services provided by private enterprises in a sample of municipalities.	2.3 PURSE baseline data in 9 municipalities and subsequent PURSE monitoring.	2.3 The GOI will encourage more private sector participation in financing urban investments.

LOGICAL FRAMEWORK

Project Title: Municipal Finance for Environmental Infrastructure

02/10/93

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
	2.4 Procedures are developed and implemented for incorporating environmental concerns within IUIDP decentralized investment packages, as indicated by an increased use of environmental impact studies and urban environmental management guidelines.	2.4 Periodic review of IUIDP investment packages.	
OUTPUTS	Illustrative Output Targets		Important Assumptions
3.1 A stable institutional source of domestic credit is developed, under which municipalities can borrow to finance part of their capital needs, including investment in environmental infrastructure.	3.1.1 The RDA and/or other sources of domestic credit, including municipal bonds, finance a growing volume of urban environmental infrastructure investment, measured in real terms.	3.1 RDA data on credit financing.	
	3.1.2 Bond offering by at least one municipality.		3.1.2 Development of a sound bond marketing system in Indonesia; development of expertise at the local level.
3.2 Policies adopted for mixing loans with grants, involving approval of loans, capital grants, and capital expenditures, under a single investment package.	3.2 The allocation of central government capital grants and direct capital expenditures take into account local capital investment needs, local capacity to pay, and the importance of environmental infrastructure bottlenecks to local economic development.	3.2 BAPPENAS information on guidelines to be used in preparation of local capital investment and financing plans.	
3.3 Establishment of a legal and regulatory framework enabling and encouraging private sector participation in the production and financing of urban services (water, waste-water, and solid waste).	3.3.1 Decrees issued for water, waste water and solid waste services that: (a) enhance private participation in the production and financing of those services; (b) formalize the legal basis for private investment to build and operate facilities and to contract with local governments to provide services; and (c) define the GOI guarantees the regional institutions in fulfilling contract obligations.	3.3 PURSE data.	
	3.3.2 Guidance and directives issued for Regional Governments that: (a) Specify the types or list of Regional Governments authorized to contract with private sector for respective services; (b) Identify the respective services, facilities or activities that may be contracted to private entrepreneurs; (c) Prescribe the contract procurement procedures; and (d) Provide model contracting procedures and documents for use by Regional Governments.		
3.4 Establishment of an indigenous capacity to deliver technical assistance and training in urban management.	3.4 Case study and other course materials prepared and 45 trainers trained in accordance with an articulated strategy for strengthening the delivery system for training, education, and technical assistance in urban management.	3.4 MFP progress report.	

LOGICAL FRAMEWORK

Project Title: Municipal Finance for Environmental Infrastructure

02/10/93

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
3.5 National guidelines are established and applied for sustainable pricing of environmental infrastructure services and for cost recovery targets appropriate for different types of environmental infrastructure.	3.5 Decrees and directives are issued for pricing environmental infrastructure based on model assessments of the cost effectiveness of alternative delivery systems for environmental service and investment priorities across sectors.	3.5 Ministry of Public Works, Home Affairs and Finance decrees and directives in progress.	3.6 Externalities associated with different types of environmental infrastructure services can be identified clearly enough to be reflected in appropriate service pricing policies.
3.6 Procedures are developed and implemented for incorporating environmental management concerns within IUIDP decentralized investment packages.	3.6 The environmental infrastructure management priorities identified in the above assessments are incorporated into an approved intergovernmental capital financing plan, for at least four cities.	3.6 BAPPENAS report on progress of urban sector planning investment and IUIDP process.	3.7 IUIDP process or its successors can be broadened to include environmental sectors not now covered. o Additional funding for technical assistance in support of MFEI policy agenda can be mobilized through an amendment to MFP or other sources.
3.7 Provision of shelter-related urban infrastructure, valued at the equivalent of $125 million benefiting below-median income urban families.	3.7 The rupiah equivalent of $125 million is spent by the GOI and local governments to provide shelter-related urban infrastructure for the urban poor.	3.7 Cipta Karya data on capital investment and sources of capital financing.	3.8 Policy and output targets of project are embraced in practice by BAPPENAS, Cipta Karya, and Ministry of Finance.
INPUTS	Implementation Target (Type and Quantity)		Assumptions for providing inputs:
4.1 US $125 million HG Loan.	4.1 US $125 million authorization over the six year life of project (1993 – 1998).	4.1 Program Agreement and Amendments.	o HG is authorized. o Amendment to MFP Technical Assistance is approved, substantially increasing level of funding and extending period of performance.
4.2 Technical assistance financed through MFP and PURSE.	4.2 Series of long and short-term technical assistance studies and training activities identified in the Policy Action Plan are carried out.	4.2 Project monitoring and evaluation.	o Timely completion of agreements with GOI.
4.3 GOI direct investment, grants, and capitalization of domestic credit facility.	4.3 GOI capital expenditures on urban environmental infrastructure through direct investment, grants, and domestically financed credit increase in real terms.	4.3 GOI expenditure records, supplemented by SIKD/MFP monitoring and special TA studies.	o Timely HG borrowing and disbursements. o Appropriately qualified TA will be available.

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ANNEX B

POLICY ACTION PLAN

B.1 Draft Policy Action Plan for MFEI

B.2 Status of Policy Action Plan for MFP

Municipal Finance for Environmental Infrastructure

ANNEX B1

POLICY ACTION PLAN

B.1 Draft Policy Action Plan for MFEI

Municipal Finance for Environmental Infrastructure

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete) — Amendment Number: _____

DOCUMENT CODE: 3

2. COUNTRY/ENTITY: INDONESIA

3. PROJECT NUMBER: 497-HG-002

4. BUREAU/OFFICE: ASIA [illegible] 04

5. PROJECT TITLE (maximum 40 characters): MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 09 DD 30 YY 98

7. ESTIMATED DATE OF OBLIGATION (Under "B" below, enter 1, 2, 3, or 4)
A. Initial FY 93 B. Quarter 3 C. Final FY 97

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY 93 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	( )	( )	( )	( )	( )	( )
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1. HG LOAN	25,000		25,000	125,000		125,000
Other U.S. 2. Credit Subsidy	3,199		3,199	15,995		15,995
Host Country						
Other Donor(s)						
TOTALS	28,199		28,199	140,995		140,995

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1)	720		860				125,000		125,000
(2)									
(3)									
(4)									
TOTALS							125,000		125,000

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

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	80	ENV					
B. Amount							

13. PROJECT PURPOSE (maximum 480 characters)

To assist the Government of Indonesia to adopt an enabling framework for integrating urban environmental management within a system of improved, decentralized municipal finance and planning.

14. SCHEDULED EVALUATIONS
Interim MM 01 YY 95 MM YY Final MM 01 YY 98

15. SOURCE/ORIGIN OF GOODS AND SERVICES
[X] 000 [ ] 941 [X] Local [ ] Other (Specify) _____

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

17. APPROVED BY
Signature:
Title: Director, USAID/Jakarta
Date Signed: MM 06 DD 30 YY 93

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
MM DD YY

AID 1330-4 (8-79)

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UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
USAID
JAKARTA

ACTION MEMORANDUM FOR THE DIRECTOR, USAID/INDONESIA

FROM : Bill Frej, Acting Director PED

THRU : Curt Christensen, Acting DD

SUBJECT : Authorization of the Municipal Finance for Environmental Infrastructure (MFEI) Housing Guaranty Program (497-HG-002)

ACTIONS:

You are requested to take four actions to initiate a policy-driven urban development program in Indonesia:

(1) approve a One Hundred Twenty-Five Million dollar Municipal Finance for Environmental Infrastructure (MFEI) Housing Guaranty program (497-HG-002);

(2) approve a negative Initial Environmental Determination for the MFEI Housing Guaranty program;

(3) authorize the issuance of up to Twenty-Five Million dollars in loan guaranties for the MFEI program (Authorization No. 497-HG-006) during Fiscal Year 1993 and the obligation of $3,199,000 (as cleared by FM in STATE 185584) to cover the subsidy costs of the first $25 million HG authorization; and,

(4) sign the Letter of Advice to the Government of Indonesia notifying them of the MFEI Program authorization.

BACKGROUND:

The Ongoing MFP Housing Guaranty Program:

On August 30, 1988, the USAID/Indonesia Mission Director approved the Municipal Finance Project (MFP) composed of a $100 million Housing Guaranty (HG) program (497-HG-001) and a $5 million development assistance grant for related technical assistance. In FY 1992, an additional $20 million in HG resources was approved, bringing the total HG authority to $120 million. The purpose of MFP is to provide assistance to the Government of Indonesia (GOI) in further developing its municipal finance system by expanding and enhancing the

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management of its financial resources. The strategy of MFP is to combine three inputs - an Urban Policy Action Plan (PAP), a HG loan program, and a grant-funded technical assistance package - into a single, comprehensive program to help the GOI create a system with built-in incentives which reduces dependence on the central government for financing urban services. MFP supports three policy-related outputs: (1) improving the administration of central allocations through a system of grants and loans that encourages local resource mobilization, (2) strengthening local government finance systems which mobilize and manage resources, and (3) establishing the basis for increased private sector participation in the provision and financing of urban infrastructure and services. MFP outputs also include $120 million in urban infrastructure benefiting below urban median income families.

Interim Evaluation of MFP:

An interim evaluation of MFP conducted in July, 1992 concluded that MFP served as a model for operating a policy-based sectoral HG program. The program has made, and continues to make, substantial progress. Major accomplishments include: decentralizing and coordinating (across sectors) the urban infrastructure programming process; improving the management and yields of the property tax and other local own source revenues; setting a sound base for expanding private sector participation in urban services; establishing the Regional Development Account (RDA) as a major step toward an effective credit finance system for local government; and institutionalizing inter-ministerial coordination at the central level.

The evaluation team recommended that the MFP project give priority to developing a strategy for local finance reform that goes beyond better tax administration. Recommendations include (1) increasing local tax authority, (2) preparing an action plan for building the RDA into a market-based credit system, (3) establishing an indigenous system for building local capacity in urban management, and (4) inclusion of policy agenda items which address urban environmental degradation. The interim evaluation of 497-HG-001 recommended that the linkage between future HG and grant programs be reinforced.

DISCUSSION:

On April 6, 1992, the Mission submitted for Asia Bureau approval a New Project Description (NPD) for a follow-on HG program --- Municipal Finance for Environmental Infrastructure (MFEI). The goal of the MFEI program is to broaden access to basic services by facilitating the delivery of urban environmental infrastructure on a financially viable and sustainable basis. The purpose of MFEI is to assist the GOI to adopt an enabling framework for integrating urban environmental management within a system of improved, decentralized municipal finance and planning. The NPD Review Committee recommended that the AA/ASIA delegate program authorization authority to the Indonesia Mission Director. Points raised at the review have been incorporated into the current PP and Annexes as have recommendations stemming from MFP's interim evaluation. Key points are as follows:

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Design Strategy of MFEI Will Require Expanded Grant-Funded Technical Assistance:

The new MFEI program will phase in after the current HG program is disbursed and will receive technical assistance from two active grants: the Municipal Finance Project (497-0365) and the Private Sector Participation in Urban Services (PURSE) Project (497-0323). To ensure continuity, a $10.0 million amendment to the MFP grant is required so that its technical assistance can reflect the new PAP agenda and so its PACD can be extended by four years to September, 1998 --- to match the follow-on HG's PACD.

Thus, the MFEI design strategy involves two steps: first, approval of the MFEI program and second, approval of the Municipal Finance Project grant amendment so that appropriate technical assistance support is available through the life of the MFEI program. The MFP grant amendment planned for Fiscal Year 1993 will raise its Life-of-Project (LOP) funding from $5.0 million to a total of $15.0 million. Approval of the new HG program at this time implies a programmatic commitment to fund an amendment to the Municipal Finance Project (497-0365). Program & Project Support Office projections of obligations for FYs 93 through 95 indicate there is sufficient authority to sustain HG-associated grant projects. Since USAID/Indonesia will not be able to fully support the GOI's urban policy action plan throughout Repelita VI without the proposed MFP amendment, authorization of HG tranches after the initial tranches will be conditioned on the prior approval of the MFP amendment.

Policy Context of the MFEI Housing Guaranty Program:

The MFEI's emphasis on strengthening the public sector's capacity to deliver basic environmental services and to improve the balance between public and private provision of these services is consistent with both USAID and GOI policies. The Mission's leading **Strategic Objective** is "to increase access to sustainable basic services". Our strategic objective complements the GOI's urban **Policy Action Plan (PAP)** which has six "themes": (1) clarifying local government responsibilities; (2) decentralizing infrastructure investment and urban environmental management; (3) enhancing local resource mobilization, with private sector involvement; (4) establishing effective mechanisms for municipal borrowings; (5) strengthening local government capacity; and (6) improving intergovernmental coordination.

Of these six themes in the PAP, the third one dealing with "enhanced local resource mobilization, with private sector involvement" and the fourth one dealing with "establishing effective mechanisms for municipal borrowings" are of the highest priority to the USAID Mission. At the annual review of PAP progress, the USAID Mission will focus on these two PAP themes, which it believes are essential to achieve the MFEI project purpose.

The Question of Attributing GOI Reforms to MFEI:

The MFEI Project Paper (Section 3.2.1.) proposes specific indicators to measure progress towards meeting seven end-of-project status (EOPS) achievements. Anticipated degrees of change in these indicators over the life-of-project are also proposed. Even though USAID is

the GOI's major interlocutor on matters of urban policy and finance, assertions of attribution are likely to remain a troublesome challenge for several reasons. First, the MFEI program will not be the major source of urban development funds, so "leverage" is not so obvious. Second, the GOI is opposed to any assertions of conditionality by foreign donors. Third, indicators selected to measure EOPS achievement are always open to subjective debate. Despite these uncertainties, USAID can assert that it has the most active sectoral program for municipal finance and infrastructure of any donor in Indonesia. Because of our continued close association with key policy makers in Indonesia, one can reasonably attribute at least part of future reforms to the support provided by the Mission program. However, in recognition of attribution concerns, the scopes of work for MFEI's annual assessments and its two evaluations will include a requirement that the consultants analyze the degree of "plausible attribution" to the MFEI project of changes in policy and in levels of investment. The assessments and evaluations will also examine the appropriateness of the chosen progress indicators and their anticipated degree of change over the remaining life-of-project.

The MFEI Project's Authorization and Approval Cycle:

The process of HG authorization approvals will entail annual progress reviews of the GOI's implementation of its Urban Policy Action Plan (PAP). Subsequent to these joint reviews, USAID will sponsor an external assessment to document constraints to progress and to propose new quantitative targets for the coming year. The GOI will also finance and verify Rupiah expenditures on an Investment Program of shelter-related environmental infrastructure for the urban poor in an amount equivalent to the loan guaranties. If the GOI has also demonstrated significant progress in meeting its PAP targets, you as USAID Director will authorize successive loan guarantees.

Conditions Precedent, Clearances, and the Initial Environmental Examination (IEE):

In addition to the standard **conditions precedent** to A.I.D.'s guaranty of a disbursement, three specific conditions will apply:

(1) Prior to each disbursement the GOI shall prepare (a) an Investment Plan which will list the estimated eligible expenditures in an amount equal to or greater than the rupiah equivalent of the disbursement and (b) a report on the Policy Action Plan which describes its status in terms of benchmarks achieved and activities in progress. The GOI and A.I.D. will hold a meeting to review the findings of the annual report.

(2) All conditions subsequent to disbursement of loans made under the earlier HG program shall have been met in full before disbursements under the new HG program may begin.

(3) In accordance with credit reform legislation, the obligation of the "subsidy cost" of each guaranty must also be authorized as a component of each annual HG authorization.

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(4) A condition precedent to the second and subsequent disbursements shall be that all conditions subsequent to prior disbursements shall have been met in full.

The IEE, which appears as Annex I, recommended a negative determination and was so approved by the ASIA Bureau's Environmental Coordinator on November 17, 1992.

AUTHORITY:

In STATE 241346 dated July 28, 1992 the AA/ASIA delegated to you as Director of USAID/Indonesia program authorization authority pursuant to Delegation of Authority No. 400, dated August 16, 1991, and interim Reorganization Delegation of Authority No. 9, paragraph A dated October 1, 1991. The total guaranty authority for the new HG program is limited to $125 million, with an annual authorization limit of $25 million.

RECOMMENDATIONS:

(1) That you approve the negative Initial Environmental Determination for the Municipal Finance for Environmental Infrastructure (MFEI) Housing Guaranty program by signing Annex I;

(2) That you approve the One Hundred Twenty-Five Million dollar MFEI Housing Guaranty program (497-HG-002) by signing the Project Data Sheet as well as in the space provided below;

(3) That you authorize the issuance of up to Twenty-Five Million dollars in loan guarantees under the MFEI program (Authorization No. 497-HG-006) for Fiscal Year 1993 and authorize the obligation of $3,199,000 to cover the subsidy costs of this $25 million HG authorization by signing the attached Guaranty Authorization (FM clearance, STATE 185584).

(4) That you sign the attached Letter of Advice to the Government of Indonesia notifying them that the MFEI Program has been authorized.

Approved : _____

Disapproved: _____

Date : 8/30/93

Clearances:

- T. Alexander, UPD/PED (draft)
- M. Lee, UPD/PED (draft)
- W. Frej, RHUDO (draft)
- N. Greeley, PPS (2/26/93)
- C. Christensen, FIN (draft)
- P. Scott, RLA (All comments per RLA memo are incorporated)
- G. Bisson, Acting RLA (draft)

Drafter:GBricker, PPS 2/12/93 (B:\HG-006AM revised 3/5/93 and 4/14/93)

Clearances for HG Authorization, Letter of Advice and Term Sheet:

- P. Kimm, PRE/H (draft)
- J. Stein, PRE/H (draft)
- D. Grossman, PRE/H (draft)
- M. Kitay, GC/PRE (draft)
- M. Lippe, PRE/H (draft)
- D. Newman, FA/FM/LM (draft)
- P. Davis, Asia/FPM (draft)

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GUARANTY AUTHORIZATION
PROGRAM NO. 497-HG-002
(AUTHORIZATION NO. 497-HG-006)

PROVIDED FROM: Housing Guaranty Authority

FOR: Republic of Indonesia

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 Twenty-Five Million only (U.S. Dols 25,000,000) 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 guarantied loans shall be made to the Republic of Indonesia (Borrower) to support the provision of shelter-related infrastructure for the urban poor.

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. 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. Republic of Indonesia 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 Republic of Indonesia (or a financial institution authorized by the Republic of Indonesia 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 guarantied 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 Three Million One Hundred Ninety-Nine Thousand (Dols 3,199,000) to cover the subsidy cost of Authorization No. 497-HG-006 and for use of United States Dollars Twenty-Five Million (Dols 25,000,000) in guaranty authority. Action must be taken to obligate these funds by no later than August 31, 1993 by receiving from the Government of Indonesia the countersigned Letter of Advice. The guarantied loans must be disbursed by no later than september 30, 1998, after which time the obligated funds expire.

Charles F. Weden
Director
USAID/Indonesia

Date: 6/30/97

MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE

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GLOSSARY AND LIST OF ACRONYMS

ADB	Asian Development Bank
Adipura	Clean cities award
A.I.D.	Agency for International Development
AID/W	Agency for International Development, Washington
AMDAL	Environmental assessment process
ANDAL	Environmental Impact Assessment
BANGDA	Directorate of Urban Development, Ministry of Home Affairs
Bappeda	Regional Planning Boards
BAPPEDAL	Environmental Impact Management Agency
BAPPENAS	National Planning and Development Board
BKSAKSI	Association of Indonesian Municipalities
BPKP	Financial & Development Controlling Board
Cipta Karya	Directorate General of Human Settlements, Ministry of Public Works
DA	Development Assistance
DIP	Central government sectoral grant
DK	Dinas Kebersihan -- municipal cleaning agency
DP3	Directorate for Management of Onlending, Ministry of Finance
DSR	Debt Service Ratio
EOPS	End of Project Status
ERR	Economic Rate of Return
FAA	Foreign Assistance Act
FMP	Financial Markets Project
FSN	Foreign Service National
FY	Fiscal Year
GDP	Gross Domestic Product
GOI	Government of Indonesia
HG	Housing Guaranty
HIID	Harvard Institute for International Development
IEE	Initial Environmental Examination
IMG	IUIDP Management Group
INPRES	Central government block grants
IUIDP	Integrated Urban Infrastructure Development Program
JUDP	Jabotabek Urban Development Project
Kabupaten	Local (Level II) government regency in rural areas
Kampung	Unserviced, informal, unplanned neighborhoods
KIP	Kampung Improvement Program
KLH	Ministry of Population and the Environment
Kota Administratip	Administered Township
Kotamadya	Municipality
MEIP	Metropolitan Environmental Improvement Program

MFEI	Municipal Finance for Environmental Infrastructure
MFP	Municipal Finance Project
MOF	Ministry of Finance
NGO	Non Governmental Organization
NIC	Newly Industrialized Country
NRM	Natural Resources Management Project
OSR	Own Source Revenues
PACD	Project Assistance Completion Date
PAP	Policy Action Plan
PBB	Property tax
PDAM	Regional water enterprise
PD&S	Project Development and Support
PIL	Project Implementation Letter
PILs	Preliminary Environmental Information Reports
PJM	Multi-year Investment Program
PP	Project Paper
PROKASIH	Clean Rivers Project
PSC	Personal Services Contractor
PSL	Environmental Education Center
PUOD	Directorate of Regional Finance, Ministry of Home Affairs
PURSE	Private Participation in Urban Services
RDA	Regional Development Account
REPELITA	National Five Year Economic Development Plan
RHUDO/EA	Regional Housing and Urban Development Office for East Asia
RIAP	Local Financing Plan
RKL	Environmental Management Plan
Rp.	Rupiah
SDO	Operating expense funds
SLA	Subsidiary Lending Agreement
SUSENAS	National Socio-economic Survey
TA	Technical Assistance
TKPP	Tim Koordinasi Pembangunan Perkotaan: Inter-ministerial Coordination Team for Urban Development, BAPPENAS
UEQM	Urban Environmental Quality Management
UMTP	Urban Management Training Program
UNDP	United Nations Development Programme
UPD	Urban Policy Division
USAID	United States Agency for International Development, Indonesia
USL	Urban Sector Loan

1. SUMMARY AND RECOMMENDATIONS

1.1 Title

Title: Municipal Finance for Environmental Infrastructure (MFEI) (497-HG-006).
Period of Implementation: 6 years (FY 1993-98).

1.2 Summary Project Description

The **goal** of the MFEI Project is to broaden access to basic services by facilitating the delivery of urban environmental infrastructure on a financially viable and sustainable basis.

The **project purpose** is to assist the Government of Indonesia (GOI) to adopt an enabling framework for integrating urban environmental management within a system of improved, decentralized municipal finance and planning.

The proposed project has two basic inputs:

1) Support will be provided for the GOI's urban policy agenda on sustainable, financially viable and environmentally sound ways to increase the level of investment in urban environmental infrastructure, through the formulation and pursuit of a Policy Action Plan. This plan will focus on the long-term development of effective programs and policies to further a viable and sustainable finance and credit system for local government. To achieve this effectively, programs and policies included in the plan will necessarily also promote: (a) private sector participation in urban services; (b) an indigenous system of education, training and technical assistance in urban management; and (c) urban environmental quality management.

2) The U.S. private sector will loan up to $125 million to the Government of Indonesia. These loans will be guaranteed by the U.S. Government under the Housing Guaranty (HG) Program. An initial HG authorization of $25 million will be made in FY 1993, with subsequent authorizations of up to $25 million a year for a total authorization level of $125 million over the six year life of project. The project is intended to support infrastructure investments made under the GOI's next five-year development plan (Repelita VI), which runs from April 1994 to March 1999.

The dollar proceeds of the HG loans can be used by the GOI as unrestricted foreign exchange. The dollars can be used for any purpose, including repayment of more costly shorter-term commercial debts. A.I.D. does not track the use of the dollars, but only verifies that at least the rupiah equivalent, as required by the HG legislation, is used to improve the shelter or shelter-related infrastructure for households with incomes below the urban median.

To enable A.I.D. to authorize loan guarantees under the HG Program, (1) the GOI will agree to finance rupiah (Rp.) expenditures on an Investment Program of shelter-related

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environmental infrastructure for the urban poor in an amount equivalent to the loan guarantees. The rupiah expenditures would be recorded for those expenditures made during the GOI's fiscal year in which the loan was disbursed (April 1 to March 31), or such other time as may be mutually agreed. The HG loans would help the GOI to meet the need for environmental infrastructure investments, especially those targeted towards the urban poor. Urban environmental infrastructure is defined as potable water systems, wastewater systems, storm drainage, solid waste collection and disposal, and other infrastructure services related to community improvements in low-income urban neighborhoods. In addition, (2) the GOI will have demonstrated support for implementation of the Policy Action Plan.

The MFEI project will be complemented by the Municipal Finance Project (MFP)(497-0365), and any subsequent amendments, and the Private Participation in Urban Services (PURSE) Project (497-0372), both of which will provide related training and technical assistance.

1.3 Summary of Project Procedures

This section provides an overview of the general procedural steps that are to be taken during the lifetime of the project. References are made to more detailed descriptions in other sections of this Project Paper (PP).

The first step will be the authorization of the initial $25 million HG loan by A.I.D. Since this Project Paper covers a $125 million HG program, this initial HG authorization may be amended up to $125 million, in annual increments of $25 million or less during the lifetime of the project, without requiring additional PP amendments. A draft Policy Action Plan is included later in the PP (Section 3.3 and Annex B), to be jointly agreed between the GOI and USAID as a component of the HG authorization process. This draft Plan is preliminary and illustrative: although it incorporates policy objectives and targets of the GOI, it has not yet been fully negotiated in detail with the GOI.

These detailed negotiations on the text of the Policy Action Plan take place following A.I.D.'s authorization of annual Housing Guarantees. Subsequently, the GOI will enter into a HG Program Agreement (the "Implementation Agreement") with A.I.D. This is a bilateral agreement which will initiate the first $25 million borrowing, allowing the GOI to select a U.S. bank, borrow U.S. dollars and receive A.I.D.'s guaranty of repayment. The Agreement will incorporate the Policy Action Plan which, at the time of signing, will have been negotiated and mutually agreed upon by USAID and the GOI. The Agreement will subsequently be amended as additional HG authorizations are approved up to a total of $125 million. The Agreement, and its subsequent Amendments, will be signed by the Minister of Finance or the Minister's designate (Head of the Agency for Financial and Monetary Analysis), after clearance by Deputy V, BAPPENAS.

The Implementation Agreement will include both the Policy Action Plan and an agreed-upon Investment Program for rupiah expenditures equivalent to the U.S. dollar loan. The

Investment Program, which is basically a menu of program and project expenditures which qualify as shelter-related investments under this program, is described further in Section 4.

After the Implementation Agreement is signed, the GOI then competitively seeks a loan from the U.S. capital market and enters into the loan agreement with the lender. After the conditions precedent to A.I.D.'s guaranty of the disbursement are fulfilled, A.I.D. then signs the Contract of Guaranty with the lender, indicating that the repayment of the loan is guaranteed by the full faith and credit of the U.S. Government. These procedures are detailed in Section 7.1. Once loan funds are disbursed, the GOI will have 12 months (or other such period of time as A.I.D. may agree to) to report and certify the rupiah equivalent expenditures. The annual cycle of the HG program will follow procedures wherein the GOI will certify to USAID that it has expended the rupiah equivalent of the HG loans on eligible shelter-related urban environmental infrastructure benefiting below-median income families. The project cycle also includes a joint GOI/USAID policy review process. This involves, firstly, an annual statement by the GOI of progress towards meeting the objectives of the Policy Action Plan. Subsequently, USAID sponsors an external assessment, which helps to document constraints to progress, if any, and to propose new quantitative targets for the coming year. The new Investment Plan and updated Policy Action Plan are then formally approved by their inclusion within a revised Implementation Agreement.

The second and subsequent years of the project cycle thus entail: (a) conducting the necessary monitoring and evaluation to ensure that the program is proceeding to the satisfaction of both parties; (b) amending the Program Implementation Agreement to add HG authorizations up to a maximum of $125 million and to adjust the Policy Action Plan and Investment Program as may be mutually agreed; (c) competitively selecting a lender; (d) entering into new loan agreements between the GOI and the lender; (e) disbursing the loan; and (f) reporting the rupiah equivalent expenditures. The exceptions to this cycle would be if verified rupiah expenditures do not equal or exceed HG loan disbursements or if evaluations indicate there are major implementation problems, in which case the cycle would be delayed or amended as deemed appropriate. Implementation, monitoring and evaluation procedures are discussed in Sections 7 and 8.

1.4 Funding and Resource Requirements

The total project cost is $125 million, which will be funded by loans guaranteed by A.I.D. under the HG program. Loan authorizations will be made in five or six consecutive years, starting with an authorization of $25 million in FY 1993.

Funding for supportive technical assistance and training, and for project evaluations, will principally be accessed from MFP and any subsequent amendments, and PURSE.

1.5 Recommendations

It is recommended that the Mission Director approve $125 million in loan guarantees under the A.I.D. Housing Guaranty program, to support implementation of a policy agenda which will broaden access to basic services, and to support the provision of shelter-related environmental infrastructure for the urban poor in Indonesia. It is further recommended that an initial $25 million in Housing Guarantees be approved and authorized in FY 1993. Four subsequent authorizations are planned to be approved over the life of the project. The Project Assistance Completion Date (PACD) will be September 30, 1998.

2. THE PROJECT CONTEXT

2.1 The Development Context

2.1.1. Economic Change and Urbanization

The Indonesian economy has performed well in the last decade. The real annual growth rate of GDP exceeded 7 percent in 1989 and 1990, and is expected to be around 6.5 percent in 1991-92. The World Bank expects the economy to continue to grow between 5 and 6 per cent a year in the current decade, and GDP per capita to almost double in the same period.

Growth has been accompanied by economic diversification. Recent years have seen a shift in economic activity, from primary activities, towards industry and services. Growth will continue to be led by the non-oil, non-gas sectors, and particularly by manufacturing industry. Manufacturing and services accounted for 62 percent of GDP in 1990; the World Bank and the GOI's Central Bureau of Statistics expect this proportion to increase to 74 percent by 2000. This achievement will be made possible, in part, by recent investments in efficient, labor-intensive export-oriented industries, often by investors from other East Asian countries.

With these economic changes, Indonesia is undergoing a rapid transformation from a predominantly rural to a largely urban society. The urban growth rate was 5.4 percent over the last decade, very high by international standards: in 1980, only about 20 percent of the population lived in urban areas; now, about 30 percent (55 million people) live and work there. Probably 80 percent of total population growth is now occurring in the country's urban areas, and a high rate of urban growth is certain to continue for the foreseeable future. As a consequence, the urban population is increasing by some 2.5 million a year in this decade. It is projected to reach over 90 million by the year 2000 -- some 44 percent of the total.

Since most of the growth enterprises are located in the urban areas of the country, successful economic growth in industry and services is predicated on the existence of efficient and productive towns and cities. It is clear that the performance of urban infrastructure directly affects productivity: for instance, by requiring industry to pay a premium for reliable

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infrastructure services, or by imposing heavy start-up burdens on small enterprises. There are, for example, cases on record of industry declining to move to Surabaya because of inadequate water supplies. (Such consequences have been well documented elsewhere; the relationship of infrastructure bottlenecks and industrial productivity, and the policy implications of this, is currently the subject of a USAID-supported research project in Indonesia.)

The supply of infrastructure in Indonesia's urban areas has not been keeping pace with economic development. Correspondingly, the continuing ability of the towns and cities to sustain growth and productivity gains is in question, possibly resulting in welfare loss and aggravating regional inequities. These increasing deficiencies of urban infrastructure will adversely affect the productivity of urban areas. Without improvements in the delivery of urban services, it is likely that the economic development process in general will suffer. Equally, the deteriorating environmental conditions noted in the next section will also hinder the government's objective of providing healthy living conditions for a productive labor force.

2.1.2 Urban Services and the Environment

While new investments in urban areas stimulate the urban economy, they create large demands for urban infrastructure and other services. Simultaneously, the high and increasing concentration of people, industry and automobiles in cities is responsible for rapidly growing levels of pollution and urban environmental degradation. Overall, the country's urban environment appears to be at a crucial point.

Water and water-related issues pose among the most serious environmental challenges: 80 percent of infant deaths are caused by water-related diseases. The percentage of the urban population served by piped water has increased, from 30 percent in 1984/85 to 36 percent in 1989/90; the proportion served by "safe" water -- from wells and piped water -- is somewhat higher. Nevertheless, Indonesia has among the lowest rates of urban coverage of safe water in Asia. The situation for the poorer part of the population, in particular, is becoming more severe as they largely rely on shallow groundwater wells -- being convenient and cheap. Groundwater is increasingly contaminated by poor sanitation and lack of appropriate drainage. Groundwater levels are sinking, due to uncontrolled extraction, sometimes resulting in saline intrusion.

Key performance issues for the water sector include the lack of strategic action plans for many cities with growing raw water shortages; decreasing water quality; groundwater degradation and depletion, and lack of enforcement of regulations; and financial management and pricing issues.

The state of development of public sanitation also gives cause for concern. Despite recent construction of new systems in Jakarta and several of the largest cities, less than five percent of urban residents are served by operating sewer systems. Sewer construction projects are under way in a number of cities, but small urban areas are receiving little attention. About

35 to 40 percent of urban residents use either septic tanks and drainage fields, or leaching pits. The remainder use facilities that either discharge directly to the surface water drainage network, or to septic tanks without a drainage field (which, therefore, overflow into surface drainage) or to deep pits. There is virtually no treatment capacity for sludge pumped from septic tanks. Most pumpage is dumped directly into rivers and canals. Rivers in and downstream from urban areas are extremely polluted. The problem of surface water contamination is believed to be considerable. For instance, pollution of the downstream areas of almost all north coast rivers of Java has reduced the possibility of using surface water for municipal and industrial purposes.

Important performance issues for this sector include inadequate treatment of human waste and the lack of enforcement of regulations, low public awareness of the health consequences of poor sanitation; and the financial problems of agencies with responsibility for sanitation.

As for solid waste management services, only about 40 percent of urban households are currently served by some form of garbage collection. Coverage increases with city size, and with income: 70 percent of wealthy households have a collection service, compared with 19 percent of the poor. On average, 75 percent of the waste of served households in Jakarta is collected; only 60 percent of that is disposed at landfill sites. Inadequate solid waste collection disrupts the operation of drainage canals, blocks traffic when garbage spills out onto roads, and threatens public health by facilitating the spread of contagious diseases.

The main performance issues for this sector include poor cost recovery and poor financial management. There is, however, a demonstrated potential for improved financial management through administrative and billing reform.

As well as affecting the health and mortality of the urban population, these environmental circumstances also have adverse economic impacts, although they have not yet been quantified. In addition to the effects noted in Section 2.1.1, economic consequences include impacts on coastal waters, with declining fisheries and lower returns from tourism. As a result of aquifer depletion, the costs of providing safe water are increasing. It has been estimated, for instance, that Jakarta spends an amount equivalent to 1 percent of its GDP in boiling water. Excessive groundwater extraction is leading to permanent environmental damage to aquifers in parts of the country. Poor drainage results in heavy traffic jams after floods, with all the heavy financial loss that these entail.

This environmental situation has developed as overall public sector expenditure in these sectors has fallen back. Total urban sector investment increased substantially between 1986/87 and 1987/88, due primarily to funding from the World Bank's Urban Sector Loan. Since that time, however, sector investment has increased at an annual compound rate of about 4.5%, well below the rate of inflation. As a result, real investment per capita has fallen significantly. Investment has fallen even farther behind the estimates of needs that underlie the sectoral program. It also has trailed budget targets. For example, the Rp. 750 billion actual investment total for 1990/91 compares with a budgeted total at the beginning of

the year of Rp 1,094 billion. Investment in water supply in 1990 was at about half the level experienced in 1987/88 (in real, per capita terms).

Both the World Bank and BAPPENAS recognize that investment levels are falling behind need. According to the World Bank, current levels are "undoubtedly below the level needed to maintain the effective life of existing networks and to meet increasing needs, not to speak of catching up with existing backlogs". Shortfalls are caused both by shortcomings in the municipal finance system -- see Section 2.1.3 -- as well as by institutional bottlenecks.

Fortunately, rapid economic growth, increasing awareness of environmental problems and environmental laws and organizations are creating the conditions for an effective response to the environmental challenge. Increasingly, government and people are aware of urban environmental conditions. Recent USAID-supported case studies of Jakarta and Ujung Pandang have shown that households, commerce and industry believe environmental improvement to be important and that many households (roughly 50 percent) are willing to pay for some basic improvements (better public toilets, for instance, or cleaner and better-designed wastewater ditches). Government leaders interviewed unfailingly showed concern for the urban environment and an interest in policies and programs to improve it.

As documented in Section 6.2.1, Indonesia has made considerable strides towards a legal and institutional framework that can address urban environmental degradation. Sufficient institutional support for urban environmental improvement has emerged to make it likely that environmental investment not only will be viewed as necessary but will actually occur and be supported by continuing urban environmental management priorities.

2.1.3 The Municipal Finance System

Within Indonesia's local government system, urban services are largely handled at Level II (municipalities and regencies). Administrative services are shared with Level I (Provinces), and a number of central government agencies (the Ministry of Public Works is the most important central department for urban services). In practice, most urban services are provided by local government under the direction of central government.

There is a high level of dependence by local government on financial transfers from central government. In 1986, about 77 percent of development and recurrent expenditures for Level II governments were met by central government grants; this was reduced to about 70 percent by 1989/90. (Other expenditures derive mostly from property tax receipts and from local taxes and user charges.) Projects budgeted and executed by central government sectoral ministries accounted for 52 percent of total expenditures in the provinces. There is a correspondingly low proportion of total expenditures which is under the discretionary control of local governments.

Development revenues are dominated by INPRES grants, most of which are specific grants for specific purposes decided by central government. 13 percent of total revenues, however, are block grants which can be flexibly allocated by local governments to sectors, based on

local priorities but subject to central government guidelines. Problems with the grant system as it exists include its relative lack of responsiveness to local demands, the inability of the system to take account of differential expenditure needs, and the fact that it provides no incentives for improving own-source-revenue generation.

Many local governments have created local public enterprises to carry out certain services: most notably, water supply enterprises. These contribute part of their income to local government revenues. Local taxes and user charges -- for water supply, refuse collection, markets, etc. -- contribute over 60 percent of local governments' own-source revenues. Typically, however, the capital of local public enterprises has been paid for by government, with the result that service fees are far below true cost-recovery levels. The GOI recognizes that conversion of these services to a cost-recovery basis is one key strategy for improving the local revenue picture and paving the way for private sector entry into service provision.

Local governments levy over one hundred different taxes, only a few of which generate significant revenues. The property tax is de jure a central government tax: the tax rate is set by law, and the assessment ratio is set by the Minister of Finance. Currently, 0.5 percent of a property's assessed value is collected annually. Property tax is generally collected by local government, which retains 68 percent of its proceeds. (The rest is retained by central government, allocated for collection costs and passed on to provincial governments.) This tax has received the most attention in efforts to increase local revenue yields. Nonetheless, the potential for revenue enhancement from the property tax remains largely untapped.

Local governments continue to view loan finance as an exceptional means of financing capital works: local government credit has financed only about 15-20 percent of urban sector investment in recent years. The greater part of this lending has been done through sub-loan agreements under international donor programs. However, a consolidated loan fund, the Regional Development Account (RDA) was formalized in 1991 in order to increase the volume of municipal credit and serve as a transition vehicle to eventual borrowing from the domestic private credit market. Although the RDA has been officially created and an Operations Manual prepared, many of the key issues regarding its form of operation remain to be clarified. The RDA is described in more detail in Section 6.1 and Annex D.1.

The February 1992 report by BAPPENAS, *Progress and Issues in Urban Development* (Annex E), points out that a longer-term approach to credit is needed, which will assure that local government lending is integrated with the rest of Indonesia's market-based financial system. Only the mobilization of voluntary domestic savings for investment in infrastructure can assure, over the long run, that urban investment needs will be met. As this report notes, the true importance of the RDA is as a transition institution that can help municipalities eventually tap into private sector savings, via the private credit market.

In recognition of the deficiencies of the municipal finance system, the GOI made a commitment in the mid-1980s to transfer both the responsibility and the authority for the leading public sector role in urban development to local governments, implying the need for dramatic improvements in local management capacity and resource mobilization. The Policy

Action Plan, initially established in 1987 and subsequently updated, serves as the base for the GOI's management of its activities. It is a broad plan for the coordination and decentralization of urban activities in Indonesia, and has been incorporated into the Municipal Finance Project (see Section 2.3).

The GOI has made substantial progress towards meeting the basic objectives of the Policy Action Plan: the major accomplishments are summarized in Annex B.2.

Progress has been most pronounced in strengthening the technical capacity of central government and local authorities to collect taxes that accrue to the local level, and in setting up institutional mechanisms that have the potential for revamping central-local fiscal relations. Despite the many accomplishments, however, the overall financing picture of local governments has not changed radically. Thus, as noted above, urban infrastructure investment is falling behind in relation to needs. Some of the key reforms -- particularly, the transition to a market-based credit system and decentralization of investment priority-setting -- are vulnerable unless they receive further reinforcement. Most of the achievements to date have potentially important impact, but need to be increased in scale to have a lasting effect.

2.2 Project Rationale

The rapid rate of urban population growth has outstripped the GOI's capacity to maintain investments in urban infrastructure at levels necessary to rectify urban service deficiencies and provide for future urban growth. The cost of providing piped water over the next ten years to achieve the GOI's target coverage of 85 percent of urban residents by the end of the century, is estimated to be about $9 billion. Repelita V and VI five-year plans (1989-99) are estimated to finance investments of $2 billion and $3 billion respectively, leaving a financing gap of almost $5 billion for the water sector alone.

Environmental degradation, particularly contamination of surface and ground water resources from the discharge of untreated household wastes, is emerging as the most serious consequence of inadequate urban finance and management. There has been growing recognition among top policy makers that, pragmatically, central government can neither afford to continue financing infrastructure investments from central grants nor adequately manage the capital budgeting process for environmental infrastructure. It is now widely accepted that the principal alternatives are decentralization of fiscal authority and urban management responsibility, and expanded private sector participation in urban services.

Within this context, USAID has been requested by the GOI to assist in designing a second HG program in support of the GOI's evolving urban policy (Annex J). The new program will be based on an extension of policy objectives established under the existing Policy Action Plan directly supported by the Municipal Finance Project (MFP), with the inclusion of a new initiative designed to advance integration of urban environmental management within the GOI's decentralized investment program. The four broad policy objectives, listed below, emphasized by the MFEI lending program and USAID supporting technical assistance

projects, are derived from the priorities identified in BAPPENAS' *Issues and Priorities* Report. Of the four objectives, the first is considered central to the program.

- Establishment of a viable and sustainable system of finance and credit for local government;
- Increased private sector participation in urban services;
- Establishment of an indigenous capacity to deliver technical assistance and training in municipal finance and urban management; and,
- Improved urban environmental quality management and the provision of urban environmental infrastructure.

The emphases in the new HG program are placed where USAID technical assistance can have the most impact. Continued support from external sources will be essential for some years if the delivery system promised by the Policy Action Plan is to become fully institutionalized and self-sustaining. There is now an even greater need to focus attention on the pursuit of a more forceful strategy at the central level for reforms that will give local governments greater control over the financing side of urban investment. As discussed in Section 2.4, technical assistance and training in support of the MFEI policy agenda will be carried out under the Municipal Finance Project (MFP), a proposed amendment to the Municipal Finance Project, and the Private Participation in Urban Services (PURSE) Project. Since USAID/Indonesia will not be fully able to fully support the GOI's urban policy action plan throughout Repelita VI without the proposed MFP amendment, authorization of HG tranches after the initial tranche will be conditioned on the prior approval of the MFP amendment.

The priorities are proposed as an integrated package: progress in each can expedite progress in another. For example, improved cost recovery by local water enterprises and training in municipal finance together would contribute to an increase in credit, since loan demand is related to borrower revenues and debt management capacity. Guidelines on pricing and cost recovery for different types of environmental infrastructure would improve infrastructure investment programming as well as operationalize urban environmental quality management. Successful implementation of a policy to promote private sector participation would reduce the financing requirements of the public sector, ease implementation constraints in the public sector, and contribute to overall efficiency of service by allowing greater competition. The rationale for each priority in the new HG program is further discussed below.

Viable and sustainable finance and credit system for local government

One of the principal policy objectives of the Municipal Finance Project under HG-001 has been strengthening the role of credit in municipal finance, while establishing the Regional Development Account (RDA) as a transition vehicle that facilitates market-based lending to

local governments and integration of municipal credit into the private financial sector. The initial Policy Action Plan led to the establishment of the RDA in a form suitable to serve as the basis for this transformation. MFEI will support the transformation itself.

While implementation of the RDA has been an important component of the HG Program, credit is only one element in an overall strategy to help establish a self-sustaining system of local and intergovernmental finance capable of meeting the country's urban investment and urban service needs. The municipal finance strategy is built around several pillars of reform articulated by the GOI in its urban sector policy:

- Strengthening local government resource mobilization
- Rationalizing the intergovernmental grant system, so that local authorities have access to more predictable and transparent central government transfers
- Establishing a workable local government credit system, which can serve as a mechanism of transition to local authority borrowing from the private capital market
- Strengthening the private sector's role as investor in infrastructure facilities and provider of local services.

These policy reforms are interdependent and mutually-reinforcing. Synergy is created when these policy initiatives are addressed as a reform package. For example, the RDA will only become a viable mechanism for lending to local government and local enterprises if borrower incentives are created by aligning credit eligibility with criteria for receiving intergovernmental grants, and by evaluating credit eligibility on the basis of local resource mobilization among other factors. Similarly, expansion of the municipal credit system will have to go hand in hand with reform of the local revenue structure, so that greater revenue-raising ability underlies the greater use of credit. A third example of linkages is that equity considerations can be accommodated without destroying the RDA's financial viability only if loans and grants are treated as integrated investment packages.

Private sector participation in urban services

A second policy objective concerns the establishment of a national system that encourages and facilitates private sector participation in urban services. The HG-001 Policy Action Plan supported the introduction of this concept and initial analysis. On-going policy dialogue and related technical assistance, research, and training necessary to advance this policy initiative are being provided through the separate $15 million Private Participation in Urban Services (PURSE) project, described in Section 2.3.3. MFEI will support this policy theme by providing a mechanism for setting new policy targets and for documenting policy gains.

Development of an indigenous system of education, training and technical assistance in urban management

The third objective of the program relates to development of an indigenous system of training and technical assistance in urban management. Development of capacity to deliver TA and training to local government is essential to the overall municipal finance strategy, since gains in local resource mobilization and the transfer of fiscal authority are dependent upon increased institutional capacity by local government. The proposed Urban Management Training Program (UMTP) will involve support for new curriculum development, training of trainers, and creation of regional training sites -- see Annex D.4. Given the vast scope of the UMTP, the policy objective is to develop a framework that other donors can "buy into" for strengthening the TA and training delivery system.

MFEI will formalize the overall policy framework and give visibility to the need for consensus in setting priorities and targets in the development of a system to replace the existing fragmented, mostly donor loan-financed, system of training and technical assistance to local governments. Curriculum development, training of trainers, and establishment of pilot training are proposed under the planned MFP amendment. Evidence that the USAID can develop an overall framework to leverage other donor support has already been demonstrated as the MFP has been successful in securing a commitment from the World Bank/UNDP-funded IUIDP Implementation Support Project for development of the urban management core course curriculum.

Effective programs and policies to further urban environmental quality management and the provision of urban environmental infrastructure.

The fundamental goal of the MFP has been to improve shelter and living conditions for the urban poor, but accelerating environmental degradation will certainly prevent achievement of this goal unless some way is found to more effectively address environmental concerns. The MFP did not address environmental issues directly, although with modifications, IUIDP, the decentralized urban development program defined in the Policy Action Plan represents not only the best, but probably the only effective vehicle for addressing urban environmental degradation. This is because the capital budgeting process is probably the most powerful tool in urban management, and the urban Policy Action Plan is the primary management tool available to reform the infrastructure financing and programming process nation-wide. The capital budgeting process (the IUIDP process of infrastructure investment planning, or PJM preparation) is perhaps the only forum in which many of the key decision-makers can collaborate to plan for the future development of a specific city in a serious way. At a minimum, such multi-sectoral capital planning requires coordination. It also enforces financial discipline by including analyses of cost and financing potentials and requiring a prioritizing of projects to fit the plan within real funding constraints. Because of the crucial role of the capital budgeting process in urban management, the Policy Action Plan agenda incorporates the integration of urban environmental management within the GOI's decentralized investment program.

Progress toward each of these policy objectives is critical to achieve the fundamental goals of Indonesia's decentralized urban development program; the program itself is unlikely to succeed if they are not addressed. Thus, if nothing is done to directly and forcefully address the accelerating environmental degradation in Indonesia's cities, living conditions, particularly for the poor, will deteriorate despite the continuance of other elements of the program. The transition to a market-based credit system is essential if there is to be sufficient resource mobilization to support the infrastructure investment (environmental and other) needed by the nation's growing urban population. Similarly, given inherent inefficiencies and constraints in the public sector, sufficient urban infrastructure development simply will not occur unless private sector participation is substantially enhanced. Nonetheless, effective, financially disciplined and tightly managed local governments will be vital to guide and facilitate the development process. This will require substantial improvement in local management capacity.

In short, urban infrastructure investment is falling behind needs. The problem is both insufficient capital and management capacity. The proposed MFEI Program will address both weaknesses through the infusion of $125 million in HG funds and associated support for broad-based policy reform, essential to the full establishment of a self-sustaining system of urban finance and urban environmental management.

2.3. Project Committee's Consideration of Design Alternatives

- More Policy Reform The Committee considered whether the PAP could generate more rapid progress in policy reform. Over the past four years considerable progress has been made in the macroeconomic sector using a collaborative approach with the GOI. The Project Committee recommends the Mission continue to endorse this approach with the HG program, as the resultant policy reforms are apt to be more long lasting.

- Less Policy Reform Due to Limited Management Capacity The Committee considered the option of focusing the four-point policy agenda on only one theme, on the grounds that the Mission may be unable to handle the broader range of topics and thus needs to concentrate on its strongest comparative advantage, technical advice concerning local government finance and credit. The Project Committee did not embrace this opinion because the professional resources dedicated to the HG programs and associated DA-funded technical assistance projects have more than tripled since the first policy agenda was approved. (See detailed discussion below.) Furthermore, the components of the four-point policy agenda are clearly inter-related. To disregard these linkages would weaken USAID's credibility with the GOI. The Project Committee thought that such a minimalist approach might even erode policy gains made in the past under the HG-001 program. Finally, acceptance of the single policy approach would disregard the Mission's approval of the PURSE project aimed at increasing the private sector's participation in the urban sector. Consistent application

of the single theme approach would argue for deobligation or at least re-design of the PURSE project. This was believed to be untenable.

- Recommended Design for MFEI The Project Committee recommends pursuing the four-point policy agenda for the program and believes there are adequate management resources available to handle them responsibly. The Committee found the four policy objectives to be well-integrated, logical, coherent, and to have been requested by the GOI. While such a program is a challenge, it is believed to be practicable. Management resources have been brought to bear from the RHUDO and Mission. The proposed $125 million HG and $25 million in additional DA resources will be well managed with a full-time staff of three USDHs, two professional FSNs, and eleven institutional contractor positions. Staff resources proposed for the new program are sixteen times what they were in 1988 when the Mission authorized its first HG program for $100 million. Since that time, overall staff dedicated to the urban sector have grown from one full-time professional to seventeen. This is considered to be a sufficient deployment of management capacity.

  Furthermore, all non-Indonesian Urban Policy Division staff (USDHs and PSCs) dedicated to the HG program and associated DA grants are funded by AID/W's Office of Housing or grant projects. DA funds in support of the urban program are expected to remain available since the program's central objective to improve basic services which is the Mission's leading strategic objective. Management of the proposed program was thus found to be within the Mission's capacity. Section 2.4.4 reviews the associated workload implications for non-UPD staff.

  The Project Committee also notes that in July 1992, just prior to the design of the new HG program, the Mission accepted the evaluation recommendation that the "new HG program to be designed will continue to support the basic elements of the current Policy Action Plan....". By hiring an eminent urban policy analyst under the Development Studies Project in October 1992, the Mission confirmed its support for the pursuit of a broad urban policy agenda.

2.4 Associated Grant-Funded Technical Assistance Projects

Technical assistance and training in support of the Municipal Finance for Environmental Infrastructure (MFEI) policy-based lending program will be carried out under two DA-funded projects: (1) the Municipal Finance Project, and a proposed amendment to this project, and (2) the Private Participation in Urban Services (PURSE) project. Credit and training system development objectives of the MFEI program will be pursued under the Municipal Finance Project until 1994. Expanded private participation in urban services and aspects of the urban environmental management objectives of the MFEI program will be promoted under the PURSE project until 1998. However, without the proposed amendment to the Municipal Finance Project, USAID/Indonesia will not fully be able to support the GOI's urban policy reform agenda throughout Repelita VI.

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The strategy for fully supporting the MFEI program is described below in terms of policy objectives of the urban Policy Action Plan addressed by each project.

2.4.1 The Municipal Finance Project

The Municipal Finance Project (MFP) was approved in September 1988, with a PACD of September 30, 1994. It incorporates $5 million in DA grant funds for technical assistance and training and an initially approved level of $100 million in loan guarantees. In February 1992, AID/W approval was given for a further $20 million of HG resources to be added to the project. The Mission Director approved this additional authorization in August 1992, bringing total guaranty authority to $120 million. Disbursement of the fourth tranche of $25 million took place in late-October 1992. The Mission expects that the MFP Program Agreement will be amended to allow disbursement of the final tranche of $20 million by early 1993.

The DA-funded technical assistance and training component of the Municipal Finance Project will, however, continue until June 1994. This has provided a variety of activities designed to complement the HG-supported policy agenda, including the services of four full-time technical advisors to the Ministries of Finance, Home Affairs and Public Works. Technical assistance provided under the project has been structured to assist the GOI meet selected policy objectives articulated in its Policy Action Plan. These include:

- Promotion of local resource mobilization: The MFP has supported this objective by focusing on two sub-objectives: a) improved financial management capacity through various activities such as the consolidation of accounting and financial management packages and an inventory of urban management guidelines, and b) improved cost recovery and management of regional enterprises via study of water authority (PDAM) financial performance, and analysis of the regulatory framework for local government.

  By the PACD, MFP support for consolidation of financial management and management information systems packages will be completed. Under the proposed amendment, emphasis relating to the resource mobilization objective may include TA and training to water enterprises in financial management, and the formulation of a unified code of regulations concerning urban management, accompanied by training in their implementation.

- Establishment of a viable and sustainable credit system for local government: Procedures for operating the RDA were established in September 1991. In January 1992 an operations manual was promulgated and the interest rate for loans made in 1992 was subsequently fixed at 11.5%, fully satisfying the sub-objective of the Policy Action Plan of creating a consolidated municipal loan fund. The MFP has been instrumental in assisting the GOI to establish the RDA. By the PACD, the MFP will have completed a review of draft legislation on the Debt Service Coverage Ratio, analyzed alternative credit mechanisms, and assessed the performance of a sample of

14 water authorities (the single largest consumer of local government debt) in managing debt.

Under the proposed MFP amendment, further assistance could be provided in: establishing a technical support program to potential RDA borrowers; assistance to central government in monitoring local government debt management; and expanded policy analysis in long-term credit policy formulation, including studies of alternative credit mechanisms (such as municipal bonds).

- Rationalization of intergovernmental fiscal relations: The MFP has designed and installed a complete system of monitoring indicators for tracking the Urban Policy Action Plan, conducted policy analyses regarding the mix of intergovernmental capital flows, and conducted research on regional investment modeling.

  Under the amendment, emphasis would be given to the development of policies for mixing loans with grants, involving approval of loans, capital grants, and capital expenditures under a single investment package.

- Establishment of an indigenous capacity to deliver technical assistance in municipal finance and urban management: The MFP has been a key resource for the GOI in developing the new strategy for training in municipal finance and urban management. MFP staff have been instrumental in the overall policy development, evaluation of current training providers, and solicitation of other donor support for preparation of a core curriculum. MFP has supported seminars to review past changes in the area of training, and funded short-term USA training in urban financial management for key GOI staff and officials.

  Under the MFP amendment, assistance might include, among other elements: (a) curriculum development for "strategic management" courses; (b) training of trainers; (c) the conduct of pilot training courses; and (d) support for development of a university network for urban management training.

An interim evaluation of the project was carried out in July 1992, which was intended, among other aspects, to provide a basis for decisions about amendments to the existing program, and about the design of a possible subsequent HG program. The main findings were that, under the Policy Action Plan: "the GOI has made, and continues to make, substantial progress toward the program's basic objectives. Over the course of the program, its major accomplishments have been:

- Transforming the process by which urban infrastructure is programmed to one in which coordinated planning and project preparation occurs across sectors for individual cities (with strong local government participation and linkage to local resource mobilization);
- Substantially improving the management of the property tax and other local own source revenues, and enhancing their yields;

- Setting a sound base for expanding private sector participation in urban services;
- Establishing the groundwork for increased municipal borrowing for urban infrastructure and operationalizing the Regional Development Account (RDA) as a major step toward a market-based credit system for local government; and,
- Establishing and maintaining a viable framework for interministerial coordination at the central level."

The evaluators found that "these accomplishments are noteworthy. Most are likely to be sustained. The original project objectives remain relevant to the GOI's urban policy. Nonetheless, the program faces serious challenges. Urban infrastructure investment is falling behind in relation to needs... Some of the key reforms -- particularly, the transition to a market-based credit system and decentralization of investment priority-setting -- are vulnerable unless they receive further external reinforcement. Priority should be given to: central reforms that allow local governments to raise the revenues necessary to manage urban development effectively; preparation of a focused strategy for building on the RDA as a transition institution designed to open municipal access to private credit markets; rapid development of an indigenous system for building local capacity in urban management; and establishing processes that allow clearer expression of local demand in framing, financing, and implementing local investment programs."

The evaluation also found that "USAID support has played an influential role in the GOI's program. It was critical in advancing the agendas for private sector participation and the RDA, has filled an important void in motivating the overall continuity of an urban sector program, and appears to have achieved true additionality in urban infrastructure investment."

The evaluation concluded that "the overall program has been successful and should be continued through a new HG program and extension and intensification of technical assistance support." The new program "should be based on the GOI's perseverance with all elements of the [Policy Action] Plan, but should give special emphasis to areas that are appropriately the focus of A.I.D. technical assistance initiatives: (1) effective programs and policies to further urban environmental quality management and the provision of urban environmental infrastructure; (2) a viable and sustainable finance and credit system for local government; and (3) private sector participation in urban services."

A full summary of the evaluation report is contained in Annex F.

Consequent to the evaluation, the Mission approved six action decisions. The actions, and Mission responses, are summarized below:

1. Design a new HG program to support the basic elements of the PAP and emphasize new key policy elements.
   - The MFEI project embodies the recommended orientation.

2. The new HG Investment Plan should include three new features: an indicative allocation of funds for the RDA; inclusion of the cost of environmental impact assessments as an eligible expense; and a requirement that GOI certify that all eligible investments have been subject to its environmental review process, AMDAL.
   - MFEI includes these three features.

3. Quarterly meetings should be held of the MFP Counterpart Committee.
   - These meetings are now being held regularly.

4. Identification of the most effective means to monitor and target, by income and gender, urban investment and tariff policy.
   - A study has been completed which makes specific recommendations for further monitoring action.

5. Annual updating of the MFP Indicators report.
   - The annual update for 1992/93 is in process; the report will be circulated within the Mission.

6. Amendment of the grant-funded TA under MFP.
   - The Mission is preparing a $10 million amendment to the MFP grant.

2.4.2 Municipal Finance Project Amendment

A $10 million amendment to the Municipal Finance Project is proposed to be developed before the second quarter FY 1993. This will, firstly, add funding for TA and training resources to the existing Municipal Finance Project, enabling the present contractor to undertake additional short-term activities during a transition period and, secondly, will provide funding for a new long-term advisory team, as well as complementary short-term technical assistance and training (GOI staff training, attendance at U.S. courses and study tours, and in-country training) that will provide continuing support to the MFEI program. These latter activities will support achievement of three of the four policy objectives of MFEI (the fourth objective will be supported by PURSE -- see below:

- Strengthening local government self-sufficiency: This would be achieved by a range of activities, which might include assistance with the development of a national system of training for urban finance and management, including U.S.-Indonesian university linkage programs; formulation of a unified code of laws and regulations for local governments in support of decentralized fiscal responsibility; assistance with reformulating the sectoral grant strategy; and provision of technical assistance in financial management to urban water supply agencies.

- Increasing the capacity for municipal borrowing: Activities may include provision of assistance to local authorities for developing their debt management capacity; TA to the Ministry of Finance in establishing the Regional Development Account as a

sustainable vehicle for large-scale lending to the sector; and development of a long-term plan to allow municipalities establish access to the private credit market.

- Improving urban environmental management, regulation and financing: Proposed activities include the strengthening of methodologies for and practices of urban environmental assessments; the development of curricula for training in urban environmental economics; development of a methodology for environmental priority-setting within the IUIDP process; and the formulation of sustainable resource pricing policies.

The amended project will be managed by a contractor under an A.I.D. direct contract reporting to a joint GOI/USAID Steering Committee.

2.4.3 Private Participation in Urban Services (PURSE) Project

The purpose of the PURSE Project, approved in September 1991 with a PACD of September 30, 1998, is to expand the participation of the private sector in the provision of selected urban environmental services (water, wastewater and solid waste) through direct investment, contracted participation in supply, delivery or other operational functions. The project is designed to provide the following outputs:

- Establishment of a legal and regulatory framework enabling and encouraging private sector participation in the production and financing of urban services;

- Guidance issued to set pricing for urban services and encourage a greater degree of self-financing;

- GOI regulations issued that regulate indiscriminate access to, or impact, on water resources and land;

- Pilot/demonstration projects that adapt, test, and demonstrate technologies for improved urban environmental services and create models for institutional, contractual, and financial arrangements in support of sustainable private participation; and,

- Training and communications program implemented that expands public and private sector awareness of the institutional, contractual, and financial arrangements that support private participation in urban services.

The $15 million PURSE project will fund a long-term technical assistance team consisting of five expatriate and three locally-hired specialists. Short-term advisors will work on specified aspects of demonstration projects, training activities, or other activities as determined by USAID in consultation with the GOI. The training and communications program will consist of public/private forums, in-country training workshops, short courses, and overseas formal training focusing on how to develop public/private partnerships for the delivery of urban

services. The project design envisions five Build, Operate, and Transfer (BOT) or Build, Own, and Operate (BOO) demonstration projects (two piped water supply, two wastewater, and one multi-services projects) as well as up to six service or performance contracts in piped water and solid waste management projects. The project will receive broad policy direction from a Steering Committee chaired by the Deputy for Regional Affairs at BAPPENAS who also chairs the interministerial coordinating team for urban development (TKPP). GOI Agencies represented on the Steering Committee are the Ministries of Home Affairs, Public Works, and Finance. The project will field the long-term advisory team in early 1993.

2.4.4 Management/Workforce Considerations

Project management for USAID/Indonesia's urban program will be provided by the Urban Policy Division (UPD) of USAID/Indonesia within the Mission Private Enterprise Development (PED) Office. Staff of the UPD and the Regional Housing and Urban Development Office for East Asia (RHUDO/EA) currently consist of one direct-hire Supervisory Housing and Urban Development Officer (RHUDO/EA Director / UPD Chief), two direct-hire Housing and Urban Development Officers, one PSC Urban Economist, and two professional FSN Project Managers. The UPD and RHUDO/EA are the same management units where USAID/Indonesia programs are concerned. The UPD Chief reports to the PED Director.

The MFP and PURSE projects are currently managed by teams of one direct hire or PSC, and one FSN professional staff, under the overall direction of the UPD Chief. The new MFP amendment will continue the oversight responsibilities of the existing MFP managers beyond the present PACD, but will not significantly add to those responsibilities except in managing the award of the new contract, and supervising the transition from the existing to the new contract. RHUDO/EA regional project management responsibilities will be carried out on a full time basis by one direct-hire Housing and Urban Development Officer, with support from the PSC Urban Economist and the RHUDO/EA Director / UPD Chief.

All Mission-funded projects and programs draw upon the resources of a variety of USAID/Indonesia senior management and support offices, including Program and Project Support (PPS), Legal Advisor (LA), Finance (FIN), Contract Management (CM), and the Office of the Director (DIR). In implementing HG-related technical assistance projects, the Urban Policy Division will employ long-term institutional contractors responsible for various management tasks, such as sub-contracting and financial accounting, to minimize the draw on other Mission offices. In addition, the A.I.D. Office of the General Counsel for the Bureau for Private Enterprise (GC/PRE) in A.I.D./Washington is charged with responsibility to perform legal reviews related to the Housing Guaranty Program, permitting the Mission LA office to perform reviews at its option. As mentioned in Section 2.3, management of the proposed MFEI program is within the capacity of the Mission as currently staffed.

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2.5 Conformity with Indonesia's Strategies and Programs

By the mid-1980s, there was widespread recognition on the part of GOI officials that Indonesia had to address its growing urban problems through the increased provision and strengthened management of urban infrastructure. Central government planners conceded that local government needed to become more involved in the management of urban services and that local revenue generation and private funding would have to be tapped to fill the ever-widening gap between required services and limited central government resources. In recent years, therefore, the GOI has been moving towards implementation of a number of urban management reforms which will both increase the financial and managerial capacity of local authorities to manage the delivery of urban infrastructure, and will seek to involve the private sector in helping meet the rising demands.

The following general themes have permeated urban policy direction in the last few years:

- Increased emphasis on the authority and responsibility of local governments to prepare plans, determine priorities and finance programs.
- A commitment to improve local fiscal conditions.
- Recognition of the need to streamline guidelines for urban development.
- Institutionalization of the process of providing support to urban communities through the Integrated Urban Infrastructure Development Program (IUIDP), which mandates direct local participation and planning to support urban infrastructure proposals.
- Expanded efforts for administrative reform and improvement.

There have been many policy reforms to these ends in recent years: the Interim Evaluation of the MFP found that "the GOI's overall program for decentralized urban development ... is one of the most innovative, forceful and pragmatic in the developing world".

Ministerial policy statements re-affirm the GOI's commitment to increasing the level of investment in infrastructure services, particularly in urban areas. Under the current Repelita (Five Year Plan), annual investment targets for urban areas are about Rp. 1,000 billion per year, three times the level of investment seven years ago. It is also the stated policy of the GOI to decentralize responsibility for providing public services, and the financial resources to build, operate and maintain those services. However, in practice much of the investment program comes from foreign borrowing: the Repelita anticipated that foreign loans would cover 65 percent of the urban investment budget, the actual proportion is believed to be significantly higher.

In March, 1992, the GOI submitted to A.I.D. its *Issues and Priorities* report (Annex E). This summarizes recent progress in urban development, and in the formulation and implementation of urban policy. It also identifies the actions proposed by the GOI for the

next two fiscal years to develop urban policy and strategy, and to accelerate program implementation. It is being used as a basis for updating the GOI's urban strategy for incorporation in Repelita VI, the next five year plan (1993-98), as well as in support of a GOI request for a follow-on HG program (Annex J).

Priority concerns of the GOI listed in that report include (1) the development of systems and instruments for mobilizing domestic resources on a large scale for urban infrastructure finance, coupled with establishing the creditworthiness of local governments; (2) systematically building environmental objectives into municipal management systems; (3) pursuing opportunities for private participation in urban public services; (4) providing incentives for improving local government revenue and expenditure performance; and (5) developing policies and programs that will further enhance local government personnel capabilities. Simultaneously, the GOI is proposing to encourage a shift of emphasis from project management to municipal management, among other ways by strengthening institutional capacities to increase the supply of urban management staff. The MFEI project will address all of these concerns.

2.6 Relation of the New HG Program to Mission Strategic Objectives and A.I.D. Regional Activities

The proposed Housing Guaranty (HG) Program with its associated technical assistance projects is fully supportive of USAID/Indonesia's Strategic Objectives as discussed in the November 1992 Mission Program Week. The Mission's formulation of its Strategic Objectives starts with the Government of Indonesia's goal of achieving newly-industrialized country (NIC) status by the year 2000. To attain growth sufficient for NIC status, Indonesia will need to achieve considerably broadened participation in a more competitive economy, reduce the rate of degradation of its natural resources, and provide considerable expansion of improved basic services. The Mission's strategic framework to help Indonesia move towards NIC status involves four strategic objectives as follows:

Strategic Objective #1:	Increased Access to Sustainable Basic Services
Strategic Objective #2:	Wider Adoption of Proven Policies & Practices in Natural Resource Management & Environmental Conservation
Strategic Objective #3:	Increased Promotion of Individual and Broad-Based Community Rights and Good Governance
Strategic Objective #4:	Broadened and Increased Private Trade and Investment.

The new HG Program is supportive of all four strategic goals, although to varying degrees, ranging from fundamentally essential for Strategic Objective #1 which advance a policy agenda to re-define the role of the public sector in urban management, to only indirectly supportive of Strategic Objective #3 by empowerment of local governments through fiscal

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decentralization. The Mission's strategic objectives are discussed below, in order of relevance to the MFEI Program.

Increased Access to Sustainable Basic Services

Physical quality of life indices have improved in Indonesia since the New Order was introduced in the mid-1960s. However, the access to basic services has been rather uneven. Not only has the revenue base not kept pace with demand for infrastructure services, but there have also been low levels of cost recovery and financial management in their provision. The MFEI project will help address these problems by assisting the GOI adopt an enabling strategy and procedures that promotes: (a) decentralization of fiscal authority and urban management responsibility, and (b) expanded private participation in urban services. This approach is directly consistent with the Mission's two-pronged strategy for achieving Strategic Objective #1, "increased access to sustainable basic services including urban services, family planning and health" which involves: "improved enabling environment for public and private delivery of basic services" (Program Outcome 1.1), and "improved private and public sector capacity for delivery of basic services (Program Outcome 1.2)." USAID's Program Outcome 1.1 closely matches the GOI's concern from its *Issues and Priorities* report: "pursuing opportunities for private participation in urban public services". The Mission's Program Outcome 1.2 is reflected in the *Issues and Priorities* report's concern which speaks of "developing policies and programs that will further enhance local government personnel capabilities".

Wider Adoption of Proven Policies and Practices in Natural Resource Management and Environmental Conservation

Many, perhaps most, urban residents, are hampered by debilitating environmental conditions. The most prevalent and widespread environmental challenges are problems of water supply, surface water contamination, and groundwater degradation and depletion. The longer municipal authorities wait to intervene with basic infrastructure and appropriate cost recovery and enforcement measures, the higher will be the cost of the eventual investment. The new MFEI program and associated technical assistance grants are directly responsive to the Mission's Strategic Objective #2 in that they will pilot administrative and technical activities which demonstrate to municipal authorities how to address issues of household waste and still be fiscally and financially sound. Successful demonstrations will show that in the long run municipal development handled in an environmentally responsible fashion in the first place is, in fact, cheaper to society than piecemeal remedies. This approach - to handle environmental issues as part of normal business - is also found as the second item of the GOI's *Issues and Priorities* report: "systematically building environmental objectives into municipal management systems".

Increased Promotion of Individual and Broad-Based Community Rights and Good Governance

This strategic objective hopes to advance the active participation of individuals and organizations in managing local affairs and in allocating their own resources. The new HG program will strengthen management capabilities of municipalities, thereby bringing the control of services closer to the consumer. Local resources managed by local officials will be dedicated to resolving local infrastructure problems. Decentralized management of basic urban services will tend to re-enforce the autonomy and independence of communities to the extent that the actions of the town managers fairly represent the preferences of the local taxpayers. The GOI's own statement on *Issues and Priorities* indirectly recognizes this concern in its priority: "providing incentives for improving local government revenue and expenditure performance" since improved revenues go hand-in-hand with improved responsiveness to needs voiced by the community.

Broadened and Increased Private Trade and Investment

The project will support the GOI's efforts to establish mechanisms which will tap local resources to fill the urban services investment gap. Potentially most significant in encouraging investment in urban services over the long-term will be the piloting of financial systems, such as municipal bonds or bonds floated by intermediary financial institutions, that enable the mobilization of resources from private capital markets for urban infrastructure investment. This concern of the new program is echoed in the GOI's *Issues and Priorities* report which includes as a high priority "the development of systems and instruments for mobilizing domestic resources on a large scale for urban infrastructure finance, coupled with establishing the creditworthiness of local governments". Without a fluid, transparent financial system for municipal investments by private citizens, and competent administrative and technical personnel to represent the interests of provincial municipalities, the above-mentioned investment gap will widen further and other urban policy needs will remain unaddressed.

Relation to A.I.D. Regional Activities

An initiative addressing the Asia region is the **US/Asia Environmental Partnership (USAEP)**. This program seeks to promote environmental improvement through increased trade and investment by American private sector companies involved in pollution prevention, monitoring and control. The USAEP also provides opportunities for fellowships exchanging representatives of American and Asian institutions to improve the sharing of environmental information among their respective countries. MFEI will provide ample opportunity to build on these concepts both through creating opportunities to invest in environmental services and through opportunities to further technical exchange in municipal finance and urban environmental quality management.

A second regional environmental initiative addressing this area is the **ASEAN Environmental Improvement Project (EIP)**. This program, while complementing MFEI, is

focussed primarily on industrial sources of pollution. The EIP will help improve the control of industrial sources though programs aimed at (1) policy and institutional development, (2) technical assistance and training, and (3) technology commercialization and investment promotion. These activities will promote environmental assessments of industries to determine cost effective opportunities for pollution prevention and control and will promote improvement in enforcement of environmental standards.

2.7 Other Donors

The GOI's expenditures on urban development have been increasing throughout each Repelita. Nevertheless, substantial reliance on external donor financing will continue to be required over the coming years to enable Indonesia to meet urban development requirements, as well as keep pace with economic growth.

Since 1984, the Government has received $4.5 billion in external assistance for urban sector development. The principal multilateral donors supporting Indonesia's urban development financing requirements have been the World Bank (34.2 percent of total assistance), the Asian Development Bank (ADB) (21.6 percent) and UNDP. Major bilateral urban donors include the Japanese, who have contributed 30.7 percent of the Government's financing needs since 1984, the Canadians and the British. Mission/RHUDO staff maintain a regular dialogue with representatives of these agencies to assure program complementarity.

The forerunner of the major, multilateral, urban programs was the World Bank's Urban Sector Loan (USL I), which was approved in 1987 and closed in 1991. The Loan provided $270 million in support for the GOI's pursuit of an ambitious urban policy agenda, designed to move the responsibility for formulating, financing and implementing local urban services from central to local governments. The USL was designed to provide technical and training support for urban sector policy and institutional reforms. The formulation of these reforms constituted the GOI's Urban Policy Action Plan.

This Urban Sector Loan, over the course of its implementation, clearly supported a number of sector achievements, including accelerated reform of the property tax system. However, the Bank's own evaluation found there to be "considerable unfinished business on the agenda. Improved allocation criteria for central government grants; establishment of a viable credit mechanism; and legislative action to expand the local tax base are all essential components of a strategy to enable the sector to establish, over time, pricing policies which can manage the increasing demand for basic urban services more effectively and generate or mobilize an increasing proportion of investment capital requirements from domestic savings, and facilitate a more decentralized framework for administering local urban services in line with government policy."

The Bank's evaluation also found that "policy and institutional reform is a gradual process", and that implementation of reforms "is necessarily uneven and fragmented, determined by what is politically possible at any point in time"; that "the sector is clearly under-funded",

and that the "key challenge in the financing area is to mobilize more resources at the local level and to utilize the available central government resources more efficiently".

In relation to the key challenge of local resource mobilization in support of fiscal decentralization, the establishment of a credit mechanism for local government was proposed under USL I. This followed a prior recommendation made in the World Bank's Indonesia Urban Services Sector Report. This credit mechanism, the RDA, was formally established by ministerial decree in October 1991, eight months after the close of USL I. However, due to currently perceived RDA institutional issues, including the incompatibility with World Bank and ADB international procurement requirements and present appraisal and financial management capabilities, the multilateral donors are not now utilizing the RDA mechanism. They are, instead, financing infrastructure investment packages through subsidiary loan agreements, according to their established lending procedures. USAID continues to maintain a close dialogue with both the World Bank and ADB regarding the establishment of this important credit scheme for Indonesian municipalities. Both donors recognize that the perceived operating weaknesses of the RDA will need to be addressed to enable them to fully utilize this facility for their future infrastructure investments. However, the Banks do support the full operationalization of the RDA. In the November 2, 1992 ADB Report to the Board on the proposed Central Java and Yogyakarta Urban Loan, the ADB stated that, "the RDA represents the first step in establishing a municipal credit scheme in Indonesia. Its success will help municipalities eventually to have access to the private capital market. In this connection, USAID has provided technical assistance to help define the RDA's future development. The Bank continues to maintain close dialogue with USAID on the RDA. Under its technical assistance program, the Bank is prepared to assist in institutional strengthening of the RDA, in cooperation with USAID."

Since the closure of USL I, current projects assisted by the World Bank include the Jabotabek Urban Development Project III (JUDP III), the Metropolitan Environmental Improvement Program (MEIP), and the East Java / Bali Urban Development Program.

JUDP III builds on two GOI efforts with substantial environmental effect: the Jakarta Metropolitan Development Plan and the Kampung Improvement Project. It is designed to fund improvements to low-income kampungs; it has a solid waste management component to aid better collection and clean up of dump sites in 83 districts. An Environmental Protection and Pollution Control component seeks to renew environmental planning efforts in Jakarta. A fourth major component funds updating of the Jakarta Metropolitan Development Plan.

MEIP was started by UNDP and the World Bank in 1989 to help Asian cities tackle their rapidly growing environmental problems. In Jakarta, JUDP III sets the framework for many MEIP efforts, including support for joint waste-water treatment, institutional strengthening of provincial pollution control authorities, environmental improvement in low-income settlements, and informal-sector, community-based composting and recycling enterprises.

The East Java-Bali project resembles many other decentralized urban development programs undertaken by the World Bank in some 30 countries. Under Subsidiary Loan Agreements,

25 percent of the funds lent by the World Bank to the GOI are on-lent to 45 local governments in East Java and Bali. Local governments invest the bulk of these funds in small urban infrastructure projects.

UNDP and UNCHS (Habitat), in association with the World Bank, are providing long-term support for the Integrated Urban Infrastructure Development Program (IUIDP). The IUIDP, which started in 1985, provides a variety of forms of long and short term TA to central and local governments for the decentralization of infrastructure planning and management. USAID and its Municipal Finance Project are closely collaborating with these efforts.

3. PROJECT DESCRIPTION

3.1 Overall Project Strategy

The strategy for the project is to combine two types of input -- support for the GOI's formulation and implementation of a Policy Action Plan, and a quick-disbursing loan program -- into a single comprehensive program. These inputs are to be focused on the GOI's national urbanization strategy, providing the GOI with both the financial and technical resources to help finance shelter-related infrastructure for the urban poor, and to put its urban policy agenda into action.

The GOI's strategy has been described in Section 2.4. However, in order for the GOI to be able to achieve its objectives, particularly in relation to urban investment targets, to attacking environmental degradation, and to the achievement of key reforms supporting the transition to a market-based credit system and decentralization of investment priority setting, additional financial resources, strengthened policy analysis and strengthened urban management capacity at local level are all required.

A new Policy Action Plan will be formulated by the GOI, and periodically re-examined jointly by the GOI and USAID. As the first strategic element in the project, the new Policy Action Plan will fall within the context of the GOI's urban development policies, as expressed in the Policy Action Plan for HG-001 and elaborated in BAPPENAS' *Issues and Priorities* report.

The second strategic element of the project, a quick disbursing loan financed by private U.S. lenders and secured by a full faith and credit U.S. Government guaranty through the Housing Guaranty Program, will provide unrestricted foreign exchange. A rupiah equivalent will be utilized by the GOI to provide a rapid source of financing for the urban environmental infrastructure investment program. The particular program supported by this mechanism will be shelter-related investments suitable for below-median income urban families. The HG Investment Program will partially remedy the deficit in urban infrastructure services caused by the combination of rapid urbanization and the reduced financial resources of central government. (The World Bank has estimated that about Rp.9,000 billion, at 1990/91 prices,

is a realistic investment target for the water sector over the five years of this program. This indicative program implies an annual expansion of 30 percent in real terms.)

These two components of the project strategy will work through existing GOI mechanisms for coordinating the actions of all central government ministries and donor agencies involved in the urban sector. In particular, the project will work with key ministries involved in TKPP (see Sections 6.6 and 7), the interministerial coordinating committee for urban development, chaired by Deputy V for Regional Affairs in BAPPENAS. Working within this existing coordinating mechanisms will enhance the effect of A.I.D.'s involvement by avoiding duplication with other donor agencies, increasing the effectiveness of some of the key participants in the process, and by showing respect for the considerable accomplishments already made in the implementation of the national urbanization strategy.

3.2 Project Purpose, Outputs and Inputs

3.2.1 Project Goal and Purpose

The goal of MFEI is to broaden access to basic services by facilitating the delivery of urban environmental infrastructure on a financially viable and sustainable basis.

The purpose of the Project is to assist the Government of Indonesia to adopt an enabling framework for integrating urban environmental management within a system of improved, decentralized municipal finance and planning.

Indicators developed by the MFP team as part of the GOI Urban Policy Action Plan monitoring system will be used, in conjunction with indicators to be tracked under the PURSE project and the MFP amendment, to measure progress toward project objectives. Measures of improved local government resource mobilization and better targeting of central-local financial transfers to the highest priority levels of local government, municipal and district, will provide proxy indices of the impact of the "enabling framework" intended to promote decentralization of responsibility for municipal finance.

Expected End-of-Project-Status (EOPS) achievements are given below, accompanied by tables that show the historical data for these indicators. Progress against EOPS indicators, and the contribution of USAID-funded technical assistance to such progress will be assessed annually as part of regular policy reviews and assessment reports.

Indicator #1: Improved performance of local governments in resource mobilization, as indicated by:

- **An increase in real per capita Own Source Revenues (OSRs). The EOPS achievement is a continued year-on-year increase in real per capita OSRs.**

Table 1: Real Per Capita Own Source Revenues	1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
Total Dati I + II per capita OSRs (constant, 1984, rupiahs)						
Real per capita OSRs (constant, 1984, rupiahs)	5,274	5,475	5,806	6,390	6,740	8,347
% annual growth rate	n/a	3.8%	6.1%	10.1%	5.5%	23.8%

Improvements in local government resource mobilization are critical to decentralization and the overall program goal of broadened access to urban services. Local resource mobilization not only contributes to an increase in the absolute level of funds available at local government level for investment in urban infrastructure, but also reduces the dependence of local governments on central grants/transfers. Increased local government revenue-raising ability is a necessary prerequisite to greater credit eligibility, reform of the central-local transfer system, and delegation of increased authority for urban management to local government.

Own source revenues (OSRs) comprise local taxes, local user charges, local enterprise profits distributed to local government and the local government share of property tax (PBB). The local governments of most countries throughout the developing world are experiencing decreases in real per capita OSRs due to both rapid population growth and the lack of flexible and efficient evaluation and rate structures to maintain the tax base and yield in real terms. However, over the period 1984/85 to 1989/90, local governments in Indonesia have been able to increase real per capita OSRs by an average of 8.6 percent a year. This has resulted primarily from increased efficiency in tax and user charge administration, rather than from substantial increases in tax and user charge rates.

Indicator #2: Improved performance of local governments in resource mobilization, as indicated by:

- **An increased share of user charges in local government own source revenues, from 19% (1989/90 actual) to an EOPS of 25%.**

Table 2: Share of User Charges in OSR		1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
Proportion of total Dati I + II OSRs accounted for by User Charges							
User Charges	(Rp. mill.)	146.9	180.7	209.5	238.5	284.2	403.2
Total OSR (PAD + PBB share)		836.3	936.2	1,100.9	1,338.8	1,537.4	2,050.9
User Charges / OSR		17.6%	19.3%	19.0%	17.8%	18.5%	19.7%
Conversion Rate, Rp. to US $		1050	1100	1420	1650	1715	1790

These data do not include user charges for PDAM water, which are not regularly reported.

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In keeping with international trends, the GOI's Policy Action Plan emphasizes a shift of the cost burden for providing infrastructure and services to the users of those services rather than relying heavily on general revenues. More rational pricing of those services will lead to better cost recovery and better decisions regarding the level of service that are actually in demand by the public. Improvements in the tariff structures and the administrative systems for user charges will increase this proportion.

Indicator #3: Improved performance of local governments in mobilizing resources from high priority sources, as indicated by:

- **An increased proportion of property taxes (PBB; formerly IPEDA) in local government own source revenues, from 26% (1989/90 actual) to an EOPS of 30%.**

Table 3: Share of Property Taxes in OSR		1984/85	1985/86	1986/87	1987/88	1988/89	1989/90
Proportion of Data I + II OSR accounted for by Property Taxes							
PBB/IPEDA Share	(Rp. mill.)	146.9	143.1	198.5	278.2	319.3	531.4
Total OSR (PAD + PBB share)		836.3	935.2	1,100.9	1,338.8	1,537.4	2,050.9
PBB share / OSR		17.4%	15.3%	18.0%	20.8%	20.8%	25.9%
Conversion Rate, Rp. to US $		1050	1100	1420	1650	1715	1790

The GOI's Policy Action Plan also emphasizes improvements of property tax yields, primarily through better valuation systems and administration rather than through changes to the rate structure. The underlying logic is that the property owners and tenants, as major beneficiaries of improved infrastructure and services, should pay a more substantial share of the costs rather than relying so heavily on the more regressive sources of general revenues.

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Indicator #4: Increased share of central-local transfer payments under local government discretionary authority, as indicated by:

- **An increased share of INPRES grants in total capital transfers from central to local governments (DIPs + INPRES), from the current 23% (1991-92 Budget) to an EOPS of 30%.**

Table 4: Proportion of Central-Local Capital Transfers through INPRES		84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92
Increase proportion of INPRES grants in total capital transfers from Central Government to Local Government (INPRES + Sectoral DIPs)									
Total INPRES Grants (to Dati I + II)	(Rp bn)	1314.8	1422.9	1272.5	912.1	1120.4	1293.9	2207.3	3350.0
Total Sectoral DIPs	(Rp bn)	6987.1	5824.0	5616.6	7767.2	13481.6	7368.1	8789.0	10949.9
INPRES/(INPRES + Sectoral DIPs)		15.8%	19.6%	18.5%	10.5%	7.7%	14.9%	20.1%	23.4%
Conversion Rate, Rp. to US $		1050	1100	1420	1650	1715	1790	1875	1975

Capital transfers from central to local governments currently provide the vast preponderance of funds for government infrastructure development projects, primarily channeled through the DIP and INPRES mechanisms. DIP projects are planned, budgeted and implemented by central government ministries and their deconcentrated offices at the local government level. After construction, these infrastructures are typically turned over to the local governments for operation and maintenance. While much progress has been made recently to ensure that DIP projects reflect local priorities (such as by requiring that they are included in locally-approved investment plans), DIP project selection and implementation is still strongly controlled by central ministries. INPRES grants, however, provide both block grants and specific sectoral grants to local governments. The local governments have very broad discretion in allocating the block grants and in identifying priorities for allocation of the specific sectoral grants to locally-identified priority projects. The implementation of all projects financed by INPRES grants is administered by the local governments themselves.

Measuring the proportion of total central-local capital transfers (DIPs and INPRES) which are channeled through the INPRES mechanism will provide a proxy indicator of both the growing capability of local governments to plan and execute urban infrastructure projects, and, perhaps more importantly, the willingness of central government to transfer those responsibilities (along with the supporting financial resources) to the local level of government.

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Indicator #5: **Better targeting of central-local financial transfers to the highest priority level of local government (Dati II), as indicated by:**

- **An increased Municipality/District share of central government SDO and INPRES grants to local governments, from the current 52% (1991-92 budget) to an EOPS of 60%.**

Table 5: Municipality/District vs. Provincial Transfers		84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92
Increase Dati II's proportion of total Central Government grants (SDO + INPRES) to both Dati I and Dati II Local Governments.									
SDO + INPRES to Dati II	(Rp Bn)	1519.1	2126.0	1903.2	1608.1	1869.7	2257.8	3038.8	4106.4
SDO + INPRES to Dati I + II	(Rp Bn)	3008.4	3882.2	3787.3	3506.6	3980.5	4845.1	6309.7	7904.0
Indicator (% to Dati II)		50.5%	54.8%	50.3%	45.9%	47.0%	46.6%	48.2%	52.0%
Conversion Rate, Rp. to US $		1050	1100	1420	1650	1715	1790	1875	1975

The GOI's policy, as stated in Law No. 4 of 1974 and reinforced in the Urban Policy Action Plan, is to target the Dati II level of government (municipalities/districts) as the focus of decentralization, as opposed to focusing on the Dati I (provincial) level. A proxy measure of the actual decentralization of responsibilities from the central to the local government level is the allocation of financial resources to support new and broader responsibilities assigned to local governments. As these responsibilities are transferred to the targeted Dati II level, so the proportion of transfers (SDO + INPRES) going to Dati II will gradually increase.

In addition to the above indicators developed under the Municipal Finance Project as part of the GOI Urban Policy Action Plan monitoring system, two additional indicators are proposed for monitoring progress toward the MFEI's purpose-level objective of establishing an "enabling framework" promoting fiscal decentralization and redefining the role of the public sector in urban management. These indicators, discussed below, concern measures for tracking expanded private sector participation in urban services and integration of urban environmental management within the IUIDP process for decentralized programming of urban infrastructure.

Indicator #6: The private sector participates in a growing volume of environmental infrastructure investment and service delivery, as indicated by:

- **An increase in the value of non-housing urban services provided by private enterprises in a sample of municipalities.**

As part of the initiation of the PURSE project, a sample survey was begun in FY 1993 to document experiences of local governments in private sector participation in urban services and to identify opportunities and constraints to this participation. The four-month survey, in progress at the time of writing, will inventory experiences to date in a sample of nine municipalities, identify potential sites for pilot/demonstration projects, develop

recommendations for increasing private participation, and formulate a set of monitoring indicators (complete with baseline data) which can be periodically updated by the PURSE project to track improvements in private sector participation.

Indicator #7: Procedures are developed and implemented for incorporating environmental concerns within IUIDP decentralized investment packages, as indicated by:

- **Increased use of environmental impact studies and urban environmental management guidelines.**

In support of the Policy Action Plan, activities proposed under the MFP amendment include the formulation of sustainable resource pricing policies; the development of a methodology for environmental priority-setting within the IUIDP process; and strengthening of methodologies for and practices of urban environmental assessments. Advisors would assist the IUIDP Implementation Support project staff develop urban environmental management guidelines and assess progress in their use by Cipta Karya and local governments as part of the IUIDP process.

3.2.2 Project Outputs

The project's outputs will support the overall goal of improving the shelter conditions of Indonesia's urban poor. The project's outputs will be based on the GOI's persistence in pursuing objectives still outstanding under the current Policy Action Plan, but will give special emphasis to (1) a viable and sustainable finance and credit system for local government, and to the other three broad themes introduced in Section 2.2: (2) private sector participation in urban services; (3) an indigenous system of education, training and technical assistance in urban management; and (4) effective programs and policies to further urban environmental quality management (UEQM), and the provision of urban environmental infrastructure. The project's two primary activities of providing policy action and shelter-related urban environmental infrastructure through the HG Investment Program, will lead to the following outputs:

A viable and sustainable finance and credit system for local government

Output 1: A stable institutional source of domestic credit is developed, under which municipalities can borrow to finance part of their capital needs, including investment in environmental infrastructure.

Output 2: Policies adopted for mixing loans with credits, involving approval of loans, capital grants, capital expenditures and debt management, under a single investment package.

These two outputs are central to the USAID-supported GOI strategy for development of a viable and sustainable system of finance and credit for local government and regional water enterprises. These outputs will be achieved by the development of the RDA as a vehicle that facilitates market-based lending to local governments and leads to the integration of

municipal credit into the private financial sector, and by improving the system for allocating intergovernmental grants, in conjunction with efforts to enhance local government resource mobilization through improved cost recovery of local water enterprises. New guidelines for local government to expand their involvement in these areas will also be developed.

Private sector participation in urban services

Output 3: Establishment of a legal and regulatory framework enabling and encouraging private sector participation in the production and financing of urban services (water, wastewater, and solid waste management).

This output will establish a national system that encourages and facilitates private sector participation in urban services. The 497-HG-001 Policy Action Plan led to the introduction of this concept and initial analysis. The Policy Action Plan under MFEI will support the development of ministerial decrees and directives necessary to establish legal, regulatory and institutional reforms.

Development of an indigenous system of education, training and technical assistance in urban management

Output 4: Establishment of an indigenous capacity to deliver technical assistance and training in urban management.

This output will consist of the design and implementation of a training, education and technical assistance system intended to strengthen the institutional capacity of local governments.

Effective programs and policies to further urban environmental quality management and the provision of urban environmental infrastructure.

Output 5: National guidelines are established for sustainable pricing of environmental infrastructure and services, and for cost recovery targets appropriate for different types of environmental infrastructure.

Output 6: Procedures are developed and implemented for incorporating environmental concerns within IUIDP decentralized investment packages.

Outputs 5 and 6 are critical to the integration of urban environmental management within the GOI's decentralized urban development program. More explicit attention to environmental issues as a part of the IUIDP process for multi-sectoral infrastructure investment programming will entail development of UEQM strategies, clarification of responsibilities for UEQM; the design of cost recovery policies to reflect environmental concerns, and greater emphasis to given to environmental infrastructure in public-private partnerships in urban services; the development of guidelines for local governments in urban environmental quality

management; and national level coordination of a program of urban environmental awareness and education. UEQM strategies are explained more fully in Annex D.2.

HG Investment Plan: local currency equivalent of guaranteed loans invested in urban infrastructure

Output 7: Provision of shelter-related urban infrastructure, valued at the equivalent of $125 million, benefiting below-median income families.

This output would be the rupiah expenditures for urban shelter-related infrastructure as defined by the HG Investment Program, described in detail in Section 4. It is proposed that these expenditures will be for water supply, human waste disposal, solid waste disposal, drainage and flood control, urban access roads, the Kampung Improvement Program, urban infrastructure planning and environmental impact assessments.

3.2.3 Project Inputs

The project will consist of two mutually supportive inputs. First, the Policy Action Plan, developed jointly with the GOI, will constitute a menu of actions intended to further the objectives of the GOI's urban policy agenda, indicating the direction and strategy involved in the policy shift towards local responsibility. Second, a rupiah equivalent of the dollar value of the Housing Guaranty Program loans will be expended by the GOI on urban shelter-related environmental infrastructure, improving the shelter conditions of the poor.

The Policy Action Plan, derived from the GOI's urban policy agenda, consists of a menu of possible actions to be taken to develop a municipal finance system for local government shelter-related infrastructure, particularly benefiting low-income households. Details of the program will be reviewed and refined together with the GOI before it is incorporated into the jointly agreed HG Program Agreement. Discussions will be held with the GOI annually to review steps on the Action Plan completed during the preceding year, determining which actions on the plan need additions or revisions to reflect changing conditions, and which actions, if any, need to be carried over to the next year's plan or eliminated.

The initial Policy Action Plan supporting the GOI's urban development agenda has six overall objectives. These objectives are the six policy-related outputs of this project, discussed in Section 3.2.2. The draft Policy Action Plan is summarized in Table 6.

The second input to this project is the Housing Guaranty Loan, by which the GOI will borrow dollars from the U. S. capital market under the A.I.D. Housing Guaranty (HG) Program. The rates of interest on the A.I.D. guaranteed loan will depend on capital market conditions in the U.S. at the time of the borrowing, and can be fixed or variable, as the GOI chooses.

The HG Program is planned for a total of $125 million in A.I.D. guaranteed loans over a period of up to six years. The HG program is intended to support GOI infrastructure

investments during the next five year development plan (Repelita VI), which begins on April 1, 1993 and ends on March 31, 1998, by guaranteeing dollar-denominated loans. The first tranche would be of $25 million and will be disbursed once eligible investments have been reported and verified for all preceding HG loans made under the first HG program, 497-HG-001.

Loan disbursements against the HG guaranty will not be conditioned. Rather, the disbursements will be based on the GOI's agreement to pursue the jointly negotiated Policy Action Plan, and all such actions will be reviewed before subsequent disbursements. Subject to the continued availability of HG resources, additional HG authorizations under this program will be jointly agreed between the GOI and A.I.D. as the program is implemented, based on annual reviews of progress on the Policy Action Plan and on a determination that required rupiah expenditures have been made for eligible projects and programs the investment program. Should either the Policy Action Plan progress be deemed not sufficient or that rupiah expenditures for eligible purposes have not been fully made, the cycle would be delayed until such was achieved. This process is planned to be repeated until the entire $125 million has been disbursed and the required rupiah expenditures are verified. A more detailed description of implementation of the HG loan program may be found in Section 7.

3.3 The Policy Action Plan

The draft Plan retains the themes of the GOI's current Policy Action Plan, while relying on BAPPENAS' *Issues and Priorities* report and the MFP evaluation as the primary guides to setting new objectives and actions within them. Table 6 outlines the objectives and actions of the draft updated Policy Action Plan, to be refined in detail and finalized with the GOI before being formally incorporated into the HG Implementation Agreement. The table notes changes in emphasis between the current Policy Action Plan for MFP and the updated Plan for MFEI. The full text of the draft Plan, including first year and end-of-project targets for each element, is given in Annex B.

The Plan is divided into six themes, comprising groups of mutually-reinforcing objectives. Of these, Groups 3 and 4 (broadly concerned with enhancing local resource mobilization, and with improving credit mechanisms) are central to achievement of the MFEI project purpose. Groups 2 and 5 (implementing decentralized infrastructure programming, and strengthening local government institutional capacity) are considered more critical to the project's success than Groups 1 and 6 (strengthening local government responsibility, and improving intergovernmental coordination).

TABLE 6: SUMMARY OF DRAFT UPDATED POLICY ACTION PLAN

1. STRENGTHENING AND CLARIFYING LOCAL GOVERNMENT RESPONSIBILITY FOR URBAN INFRASTRUCTURE

Now that laws and decrees clearly assign primary responsibility for urban development to the local level, with more detailed clarification of functional authorities, most basic objectives under this theme have already been achieved during HG-001. The main objective that remains to be pursued is continuing to upgrade the administrative status of urban areas to enable more effective self government; i.e., the new program will assist in the establishment of presently unclassified urban areas as Kota Administratip and moving a number of Kota Administratip up to Kotamadya status. There will also be new actions to clarify responsibilities related to the setting of standards and implementation of monitoring programs related to the environment and other aspects of urban development.

Objective 1.1: Establish appropriate administrative status for urban areas.

Action 1.1: Identify new urban areas for classification as Kotamadya and Kota Administratip.

Objective 1.2: Clarify responsibilities for urban environmental quality management and the establishment of related standards and monitoring.

Action 1.2: Develop regulations and guidelines to clarify responsibilities for urban environmental quality management; establish and implement related standards and monitoring programs.

2. IMPLEMENTING A COORDINATED AND DECENTRALIZED PROCESS FOR PROGRAMMING URBAN INFRASTRUCTURE INVESTMENT AND URBAN ENVIRONMENTAL QUALITY MANAGEMENT

The first wave of integrated multi-sectoral IUIDP planning is at an advanced stage for major urban areas nation-wide. The proposed major output under this theme relates to the next wave of program development, emphasizing urban environmental quality management. Actions support: (1) much greater direct involvement and control by local leadership in investment planning and implementation; (2) reorientation of investment program strategies based on environmental criteria and analysis and the development of associated programs to address environmental degradation; (3) greater recognition of consumer demand and willingness to pay as the basis for infrastructure investment decisions; (4) the strengthening of the environmental impact assessment (AMDAL) process for all urban investment projects; (5) the use of management systems and other techniques to streamline the processes of project preparation, appraisal, financing, and implementation.

Objective 2.1: Develop and implement local urban environmental quality management (UEQM) strategies and programs as a part of IUIDP implementation.

Action 2.1a: Develop guidelines for urban environmental quality management analysis, strategy preparation, project impact analysis and implementation. Modify IUIDP guidelines to reflect these activities as well as greater explicit analysis of consumer demand and willingness to pay as a basis for investment programming.

Action 2.1b: Develop urban environmental quality monitoring program.

Action 2.1c: Develop local urban environmental quality management programs associated with IUIDP program updates.

Objective 2.2: Strengthen the management of IUIDP to improve the speed and effectiveness of program delivery.

Action 2.2a: Develop a practical management information system for monitoring IUIDP implementation.

Action 2.2b: Prepare management studies of IUIDP processing at the provincial and central levels to identify bottlenecks and to recommend actions to streamline processing and assure effective program delivery.

3. ENHANCING LOCAL GOVERNMENT RESOURCE MOBILIZATION, FINANCIAL MANAGEMENT AND INVOLVEMENT OF THE PRIVATE SECTOR IN INFRASTRUCTURE AND SERVICE DELIVERY

Although good progress was made on all these fronts during HG-001, continued progress is fundamental to MFEI. Local resource mobilization will focus on the two most important sources of local revenue: continued improvement in property tax administration and property tax revenue collection, and greater use of cost-recovery service pricing. Priority will be given to the pricing of water supply, wastewater removal and treatment, solid waste collection and disposal, and other environmental services.

Objective 3.1: Enhance local government resource mobilization.

Action 3.1a: Improve revenue collection under the property tax.

Action 3.1b: Improve cost recovery of local water companies.

Action 3.1c: Improve cost recovery of local solid waste collection services.

Action 3.1d: Devise pricing strategies for water sector services (water supply, groundwater extraction, and wastewater collection, removal and treatment).

Objective 3.2: Support private sector participation in environmental infrastructure and service delivery

Action 3.2: Identify and support implementation of local public sector actions and investments that facilitate private sector involvement in environmental infrastructure and service delivery.

4. ESTABLISHING EFFECTIVE MECHANISMS TO SUPPORT MUNICIPAL BORROWING, AND IMPROVING THE SYSTEM FOR ALLOCATING INTERGOVERNMENTAL GRANTS

Under HG-001, the Regional Development Account (RDA) was formalized as a universal credit mechanism for municipal governments and local public enterprises but operational implementation has been limited. MFEI will support the development and institution of systems to implement the principles already embodied in the RDA regulations, and will support eventual integration of RDA into the commercial financial sector, by moving municipal lending closer to private market principles.

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For the foreseeable future, central government grants and direct expenditures will continue to finance a large part of local infrastructure investment. The development of clearer criteria for allocating these resources is an important part of the municipal finance agenda. Central government grant resources are appropriately targeted on infrastructure facilities that service the poor, have substantial externalities associated with them, or are important for national economic development objectives. The MFEI Policy Action Plan will support this targeting, while seeking to give local authorities greater control over the detailed allocation of grant funds to projects that meet these criteria. For more routine services, cost recovery pricing and debt financing of investment provide a sustainable basis for efficient service provision.

Objective 4.1: Support development of the RDA as a transition vehicle that facilitates market-based lending to local governments and integration of municipal credit into the private financial sector.

Action 4.1a: Carry out an external evaluation of the RDA's operations capacity, its working relations with local governments, capitalization policy and collections record.

Action 4.1b: Prepare a 5-year institutional development plan for the RDA.

Sub-objective 4.11: Establish a system for maintaining the creditworthiness of RDA borrowers.

Action 4.11a: Support mechanisms for evaluating the creditworthiness of municipalities applying for RDA loans.

Action 4.11b: Support procedures for imposing sanctions on municipalities that are in arrears on RDA loan repayments, including refusal of new RDA loans.

Action 4.11c: Establish routine disclosure of local government borrowers under RDA, terms of loans, and repayment records.

Sub-objective 4.12: Institute a system for domestic capitalization of the RDA.

Action 4.12: Support procedures for capitalizing the RDA, including reflows of outstanding loans under RDA management, GOI resources and private market borrowing.

Sub-objective 4.13: Encourage the establishment of alternative mechanisms for the mobilization of domestic credit for local government financing of urban infrastructure.

Action 4.13a: Explore alternative short-term and long-term mechanisms to mobilize domestic credit for local government financing of urban infrastructure investments (e.g. municipal bonds).

Action 4.13b: Prepare an action plan for the implementation of alternative means of integrating municipal credit into the private financial sector.

Objective 4.2: Improve the system for allocating intergovernmental grants.

Action 4.2: Prepare a study of how incentives can be built into the grant structure and the system for allocating grants, to encourage targeting of grant funds to activities most appropriate for central-level subsidy: (a) investment packages for poor regions; (b) investment projects that benefit low-income households; (c) investment projects that generate high degree of externalities.

5. STRENGTHENING THE INSTITUTIONAL CAPACITY OF LOCAL GOVERNMENTS

Earlier work under this theme produced a comprehensive analysis of present local government capacity and approaches to improving it. The agenda for the future entails completing work to attain one previous objective (establishing and clarifying management guidelines for local government) and new work to address one additional objective (developing an indigenous system for training and technical assistance in urban management, including a special emphasis on urban environmental quality management).

Objective 5.1: Develop coordinated system of urban management guidelines for local governments.

Action 5.1a: Complete an inventory and analysis of all existing laws, regulations, and guidelines issued by central government ministries/agencies which are relevant to urban management at the local government level.

Action 5.1b: Design new system of guidelines for local urban management, including urban environmental quality management and incorporation of the role of the private sector, and modify existing laws and regulations as required for its implementation.

Objective 5.2: Develop indigenous self-sustaining system of training and technical assistance for local governments in urban management.

Action 5.2a: Design urban management training and technical assistance system and negotiate with providers as a basis for implementation (including general urban management, financial management, service delivery management, capital investment programming, and spatial planning, urban environmental quality management).

Action 5.2b: Implement urban management training and technical assistance system.

6. IMPROVING INTERGOVERNMENTAL COORDINATION AND CONSULTATION IN URBAN DEVELOPMENT

Accomplishments under the earlier plan include the establishment and solidification of TKPP to coordinate the program at the national level. Three objectives are included in the new program: (1) continuing the operation of TKPP; (2) strengthening central monitoring and research support for the program; and (3) coordinating a nationwide effort to stimulate awareness of environmental problems and solutions in Indonesia's cities.

Objective 6.1: Continue the operation of TKPP in program coordination, monitoring, and policy development.

Action 6.1: Hold TKPP meetings at least on a quarterly basis, with agendas that entail reviews of regular progress reports, the formulation of new tasks and corrective actions in relation to those review, and the revision of program plans in response to changing needs and conditions.

Objective 6.2: Strengthen central monitoring and research support to facilitate decentralized urban development and targeting of government investments.

Action 6.2a: Develop national system of urban monitoring indicators.

Action 6.2b: Develop urban research agenda to be sponsored by internal and external technical assistance.

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Objective 6.3: Develop national level urban environmental awareness program.

Action 6.3: **Design and implement national awareness and education programs concerning the urban environment.**

3.4 Technical Assistance and Training

Technical assistance and training to support the Policy Action Plan will be provided under two separate projects. First is the technical assistance and training component of the existing Municipal Finance Project (MFP), which is scheduled for completion in August 1994. Work already funded under that Project will be reoriented to support the MFEI agenda and an amendment is proposed to provide an additional $10 million to that project in support of MFEI objectives (Section 2.3.2). Second, a significant portion of the technical assistance and training element of the existing Private Participation in Urban Services (PURSE) project will also directly support objectives under the MFEI Policy Action Plan (Section 2.3.3).

Consistent with the priorities discussed above, new MFP technical assistance and training initiatives will be focused on: (1) reform of the system of local government finance; (2) urban environmental quality management; and (3) the development of urban management guidelines and the development of an indigenous system of technical assistance, training and education in urban management. Annex D.4 describes possible components of an expanded TA and training program.

4. THE INVESTMENT PROGRAM

4.1 The HG Investment Objectives

In the bilateral Program Implementation Agreement, A.I.D. and the GOI will jointly agree upon an annual investment program for urban shelter-related environmental infrastructure in an amount equal to or greater than the rupiah equivalent of the loan guaranteed under the HG program. The agreed upon investment program will, in fact, be a menu of eligible program or project expenditures which are mutually acceptable. Expenditures from these eligible programs or projects may be submitted as evidence to liquidate the dollar equivalent loan "advance". The investment program has two objectives:

1. To provide additional financing for priority shelter-related urban environmental investments that would otherwise not be possible within the resources now available to central and local governments, during the period of policy transition.

2. To encourage the targeting of resources towards investments that will improve the shelter and environmental conditions of the urban poor.

4.2 HG-Eligible Programs

The HG authorizing legislation requires that HG programs support the delivery of shelter-related infrastructure suitable for below median income households (defined in Section 6.4). The HG program is intended, among other things, to provide "essential urban development services", and to pursue "programs [to] increase the availability of domestic financing for improved shelter and related services" suitable for families below the median income. These program goals are consistent with those of the GOI, as expressed in BAPPENAS' *Issues and Priorities* report.

In addition, through joint agreement between A.I.D. and the GOI, HG-eligible expenditures will include expenditures devoted to "environmental infrastructure": i.e, infrastructure and related services that directly improve the physical living environment of below-median income households and/or act to avert future degradation of that environment.

Annex D.2 reviews both the environmental risks now being faced by the urban poor in Indonesia and the GOI urban infrastructure programs now in place to address them. Based on that analysis, the following programs are classified as eligible on environmental grounds.

- Water Supply, including Leak Detection and Prevention. Clean water is essential for life and to avoid the effects of the transmission of water borne disease now prevalent in urban Indonesia due to the pollution of ground water.
- Human Waste Disposal. The proper disposal (and treatment) of human wastes are directly essential to prevent the transmission of disease.
- Solid Waste Disposal. Similarly, the inadequate disposal of solid wastes can lead to disease transmission and increase other life threatening risks (such as fire).
- Drainage and Flood Control. Floods can threaten life directly and standing water in residential areas can transmit water borne diseases directly as well provide breeding grounds for disease-transmitting insects.
- Urban Access Roads. Access roads in low income settlements are necessary to avert the raising of particulate matter in the air and are often an inseparable part of other necessary environmental improvements (e.g., drainage).
- Kampung Improvement Program. This program combines environmental improvements as defined above in low-income residential areas.
- Urban Infrastructure Planning and Environmental Impact Assessments. These activities are essential to assuring the effective provision of environmental infrastructure and avoid negative environmental impacts in development.

In accordance with the program objective of supporting development of the Regional Development Account, RDA loans for environmental infrastructure will be HG-eligible:

- RDA Loans: loans made through the RDA for the any of the preceding categories of investment. (See also Section 4.3, below.)

4.3 Eligibility Requirements

Expenditures will be qualified as HG-eligible if they directly benefit below-median income families and are verifiable as such (see Section 8.3 for a discussion of monitoring procedures). Because the GOI already incorporates explicit targeting and monitoring in order to meet its own objectives, verification is not considered inconsistent with GOI policy.

In the Program Agreement for the Municipal Finance Project and its subsequent amendments, A.I.D. and the GOI agreed that a specified percentage of actual expenditures in each investment category benefits households below the median income. For the purpose of calculating HG-eligible expenditures, the Program Agreement for MFEI will use the same percentages as in the MFP Program Agreement. However, USAID and the GOI may periodically review these percentages and will include any agreed changes in subsequent Investment Plans.

Expenditures financed by other donors are not eligible as HG-related expenditures.

Three new objectives are established under the MFEI investment program to further support and reinforce important objectives within the GOI's decentralized urban development program.

The first objective relates to support for the Regional Development Account (RDA), which is to be a principal vehicle for expanding investment resources available to local governments. In HG-001, 22.9 percent of the HG eligible expenditures under the third tranche were channeled through the RDA. To further support this institution, a share of RDA capitalization should be assured in the MFEI program. Accordingly, in the MFEI investment program, no less than 20 percent of the rupiah equivalent of the amount of each tranche shall be transmitted directly to the RDA to be on-lent to local governments and enterprises consistent with established RDA lending terms and practices.

It should be noted that RDA criteria for granting loans will not always require their use solely for HG-eligible projects as defined above. Constraining the RDA to do so might conflict with the regular operating procedures and sound business practices of that institution, and thereby deter its strengthening as a link to the expanded provision of market-based credit for urban development in Indonesia. Therefore, there will not be any requirement that any specific funding channeled to the RDA be used solely for HG-eligible investments, only that the GOI be able to document HG-eligible investments from the RDA equivalent to 20 percent of the rupiah value of each loan.

The second objective relates to local participation in the investment process, which is an essential part of the purpose of MFEI. The GOI has implemented the IUIDP to expand such participation. In IUIDP, local governments set priorities for investments in developing medium-term local investment programs (PJMs). Then, local PJMs are aggregated and reviewed for financing at the provincial level before being channeled to the central government for consolidation across the country. Accordingly, to be eligible, all projects

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under the MFEI investment program must be either an accepted component of a local government-approved PJM or otherwise (individually) approved by local government as adequately reflecting local priorities and plans.

The third objective relates to encouraging the application of environmental impact assessments. While the provision of environmental infrastructure specified above is normally, by definition, environmentally positive, some larger projects could have indirect effects that would be harmful from an environmental perspective impact assessments. The GOI's current environmental assessment process (AMDAL) appropriately begins with a screening process. Only those projects that screening indicates might have deleterious effects require a full impact assessment. Accordingly, to be eligible, all projects under the MFEI investment program must have passed through an initial screening in the AMDAL process; impact assessments will be prepared for those projects for which AMDAL indicates they are needed.

It is proposed that related risk assessments also be incorporated into or be made complimentary to the AMDAL two step process. Accordingly, when this has been achieved, to be eligible, all projects under the MFEI investment program must have passed through an initial screening with vulnerabilities and risk assessments prepared for those projects where initial screening indicates this is needed.

4.4 Program Targets

Annex C gives details of historical trends of the GOI's urban investment program, and summarizes Investment Program expenditures under HG-001.

The same annex provides an estimate of sectoral allocations under MFEI. However, the figures quoted there can be no more than indicative since, although investments under the program must meet the basic eligibility criteria for HG-eligible environmental infrastructure as specified above, beyond that, the program gives primacy to determinations of local governments as to their own priorities. The indicative investment plan for MFEI targets support for sustained emphasis on KIP investments and increasing emphasis on human and solid waste programs. However, these proportions can and should be adjusted as the program proceeds, depending on local government perceptions of priorities in relation to central government's budgetary allocation process.

5. FINANCIAL PLAN

Project costs are estimated to be $125 million in investments and $415,000 for monitoring and evaluation.

The A.I.D. contribution is shown in Table 7, and the GOI's projected contribution is shown in Table 8. (Although it is expected that the GOI will invest more than the equivalent of $125 million in HG-eligible investments over the project period, as it has done under HG-001, this is not a condition of the program, and so is not reflected in the summary tables.) Table 9 provides the summary cost estimate and financial plan. Table 10 provides the projected obligation and commitment plan by fiscal year.

It is anticipated that there will be five HG authorizations, beginning with an authorization of $25 million in US FY 1993.

TABLE 7: COSTING OF A.I.D. INPUTS ($000)

Item	Description	Est. Cost	Method of Financing
I. Housing Guaranty*	5 loan guarantees	$125,000	Guaranty
Credit Subsidy	5 tranches @ 12.796%	15,995	
II. Monitoring, Evaluation and Audit	3 assessments @ $40		Direct Payment+
	2 evaluations @ $60		Direct Payment+
	Audit @ $45	290	Direct Payment+

* The Housing Guaranty facilitates the GOI $125 million capital investment contribution and does not consist of funds in addition to the GOI amount.

+ To be provided under A.I.D. Direct Contracts. Costs of assessments, evaluations and audit will be financed by the Municipal Finance Project (497-0365), as amended.

TABLE 8: COSTING OF GOI INVESTMENTS/CONTRIBUTIONS ($000)

Item	Description	Estimated Cost Itemized	Estimated Cost Total
I. Urban Investment Programs	Capital Investments		$125,000
A. Water Supply		$30,000	
B. Human Waste Disposal		15,000	
C. Solid Waste Disposal		10,000	
D. Drainage / Flood Control		8,000	
E. Urban Access Roads		3,000	
F. Kampung Improvement Program		30,000	
G. Environmental Impact Assessments		4,000	
H. RDA		25,000	
II. Evaluation/Monitoring	Staff assigned to project by TKPP & BPKP		125
	TOTAL		$125,125

TABLE 9: SUMMARY COST ESTIMATE AND FINANCIAL PLAN ($000)

Source:	HG Guaranteed Loan F	HG Guaranteed Loan L	A.I.D. Grant F	A.I.D. Grant L	GOI F	GOI L	Totals F	Totals L	Grand Total
I. Urban Investments	125,000*	--	--	--	--	125,000*	--	125,000	125,000
II. Credit Subsidy	--	--	15,995	--	--	--	15,995	--	15,995
III. Evaluation/ Monitoring	--	--	290	--	--	125	290	125	415

* Under the HG program, the GOI agrees to make rupiah expenditures for eligible infrastructure investments in amounts equivalent to the loan guarantees.

F = Foreign currency L = Local currency

TABLE 10: PROJECTED OBLIGATIONS/COMMITMENTS/EXPENDITURES BY FISCAL YEAR ($000)

FY	Loan Guarantees	Credit Subsidy (OBL/COM)	A.I.D. Grant (OBL/COM)	GOI
93	25,000	3,199	40	25
94	25,000	3,199	60	25
95	25,000	3,199	40	25
96	25,000	3,199	40	25
97	25,000	3,199	110	25
Totals	125,000	15,995	290	125

6. TECHNICAL ANALYSES

6.1 Municipal Credit

One of the principal policy objectives of the Municipal Finance Project under HG-001 has been strengthening the role of credit in municipal finance, through establishing the Regional Development Account as a market-oriented, routinely accessible source of credit for local authority investment.

Annex D.1 considers how much progress has been made toward the establishment of a municipal credit system, and how much priority should be assigned to this objective in the MFEI policy program.

It reports that, although there is a strong case for greater use of credit as part of the municipal financing system, and for moving toward market rates of interest on municipal loans, there are also practical constraints on both the volume of loans and interest rates. These include the ability of municipalities to repay loans from local revenue sources. An under-developed local revenue system currently limits municipalities' revenue options, and constrains their capacity to borrow. Recognition of these limitations has prudently constrained local loan demand. In the future, reform of the local revenue structure will have to go hand in hand with expansion of the municipal credit system, so that greater revenue-raising ability underlies the greater use of credit.

Some important reforms in this direction already have been implemented For example, local water authorities (PDAMs) are now encouraged, and even required, to charge full cost-recovery tariffs, which allow them to raise the revenue to repay capital loans. Solid waste collection tariffs have been increased in some municipalities, and can be raised in others to finance capital investment and borrowing. Considerable room for improvement exists in collection practices, as well, to increase effective revenue yields.

Local property tax rates in Indonesia, however, are extremely low, making it almost impossible to recover the cost of loans used to finance general improvements or economic development projects. If municipal credit is going to be used on a significant scale to finance general local investment, it will be critical to increase local taxing authority so that loans can be repaid.

Local governments often insist that they are unable to afford to borrow at market rates of interest, and that therefore municipal loans should be made at highly subsidized interest rates. Under the current municipal revenue system, and given the poverty of many regions of the country, this inability to pay is rooted in fact. However, the appropriate solution is not to subsidize interest rates, which would create fundamental difficulties for ultimately integrating municipal lending within the commercial credit market. It is more appropriate to pursue the course which Indonesia already has adopted: mixing loans and grants, or loans for local investment with central investment installed locally at no cost to local authorities, in a single investment package.

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The annex finds that the RDA represents the most appropriate base in Indonesia on which to build a municipal credit system. Nevertheless, its establishment just begins the job of building a long-term role for credit in the urban sector. Credit presently finances only a small proportion of urban sector investment -- estimated at about 15-20 percent in recent years. The greater part of this lending has been done through sub-loan agreements under international donor programs, outside of the RDA.

BAPPENAS' *Progress and Issues* report points out that a longer-term approach to credit is needed, which will assure that local government lending is integrated with the rest of Indonesia's market-based financial system. It notes that the true importance of the RDA is as a transition institution that can help municipalities eventually tap into private sector savings, via the private credit market.

The annex recommends a five-step, sequential, strategy for the RDA's institutional development:

1. Conduct an external analysis of RDA's operations and local authorities' perceptions of how operations can be improved.
2. Prepare a five year plan for RDA's institutional development that has the support of the Ministry of Finance, BAPPENAS, and local governments. This plan would incorporate several key principles, as follows:
   - There must be adequate and stable capitalization of the RDA.
   - Loan applications should be encouraged.
   - RDA's appraisal practices should be clarified.
   - Loan repayment must be taken seriously.
   - The RDA should develop a long-term plan for identifying and reducing local government credit risk.
   - The RDA should conduct its operations in an environment of full disclosure and transparency.
   - A consistent interest-rate policy needs to be articulated.
   - Any protections against municipal credit risk should be equally available to private and public lenders.
   - Commercial banks could be integrated into the municipal lending system, first by serving as collection points for loan repayments and eventually initiating municipal loans that are repurchased by the RDA.
   - RDA should operate as a credit institution that exists to serve local governments.
   - Local government revenue-generating capacity needs to be greatly enhanced if RDA is to substantially increase the scale of its lending.
3. Provide technical assistance to RDA in the areas highlighted by the institutional assessment as priority needs.
4. Provide technical assistance to local borrowers and potential borrowers on debt management, project preparation, and use of the credit market.
5. Implement the policy changes within RDA that are necessary to fulfill its institutional development objectives.

6.2 Urban Environmental Quality Management

Annex D.2 reviews prospects for recognizing urban environmental quality management as a major theme in the Policy Action Plan for the MFEI Project and associated technical assistance and training programs.

It finds that Indonesia is, in fact, ahead of many other countries in attempting to address its environmental problems. In 1986, the GOI established a process requiring the preparation of environmental impact assessments of government and major private sector projects (AMDAL), and a Presidential Decree in 1990 formally established the Environmental Impact Management Agency (BAPEDAL), providing a general mandate for pollution control and oversight of the AMDAL process.

However, these steps alone are not likely to be forceful enough to address environmental degradation in Indonesia's rapidly growing cities. Much emphasis of late has been placed on strengthening AMDAL, and studies indicate that much needs to be done to improve it. But environmental specialists are increasingly recognizing that, while they are a necessary part of the process, environmental impact assessments are not enough: they often come too late to affect the key public decisions that determine environmental quality. Environmental criteria should be given prominence at the very start of the planning process but there is presently no mechanism to ensure that will occur.

It is true that a comprehensive approach is being taken in Jakarta where the GOI and local officials are working to sort out institutional responsibilities and deal with issues such as joint wastewater treatment, institutional strengthening, environmental improvement in kampungs (with a new emphasis on community participation), and informal-sector community-based composting and recycling enterprises. But similar activities are not under way elsewhere. The development of a complete policy, as well as of the institutional capacity to deal with urban environmental quality management (UEQM) nationwide, is at its earliest stage.

The most basic understanding behind the GOI's urban Policy Action Plan is that the institutional capacity in support of local leaders must be developed more fully to enable them to guide urban development effectively within a decentralized environment. It is self evident that the solution to most urban environmental problems will depend on improved infrastructure and services, or programs closely linked to them. Therefore, the decentralized urban development program defined in the Policy Action Plan is not only the best, but probably the only effective, vehicle for addressing urban environmental degradation.

The annex describes how the following themes may be supported as a part of environmental management within the program.

- Responding effectively to service demands that can be met by local governments, and helping to structure a tariff policy that recovers costs from beneficiaries to the extent feasible.

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Households now pay for safe water and garbage collection, and are willing to pay more for some types of environmental infrastructure. But it is the essence of the market system that households not be forced to pay for services they do not want to buy. The decision as to which local environmental services should be delivered through markets, subject to consumer choice, and which should be delivered collectively through the public sector, and how these latter should be paid for, will be critical to establishing a self-sustaining system of environmental management. Greater exploration of demand, the cost of different options for environmental infrastructure, and the external (community-wide) benefits associated with each is needed before pricing decisions can be made.

- Appropriate technologies.

Water-borne sewage systems and piped water to individual households are clearly beyond the financial reach of many of the households that the project seeks to serve. However, alternative technologies of the types supported by KIP offer lower costs and promise much greater coverage. Further exploration of these options must play an important role in any strategy to improve the urban environment.

- Building popular support for and awareness of the benefits of environmental quality.

More than most countries, Indonesia has a rich network of local organizations and heritage of community self-help, even in urban areas. This organizational network provides a foundation that can be built on for environmental infrastructure that reaches low-income people. It also provides the framework for collective choice at the community level in prioritizing environmental projects.

- Private sector participation.

Where markets are judged to be the appropriate institutional vehicle for delivering services, priority should be given to private providers. Already, private sector providers are active in such key areas as septic tank cleaning and sludge removal and solid waste collection. Community preparation for the use of private markets in environmental services provides a natural link between MFEI and the PURSE project.

- Measurement and monitoring.

Better data collection and better analysis of the impact of environmental conditions on human health and economic growth are necessary conditions for better-informed environmental choices. Involvement of the kampungs in environmental quality monitoring is one way to give them a greater sense of control over environmental conditions and investment choices.

6.3 Social Soundness Analysis

6.3.1 Beneficiaries

The authorizing legislation for the HG program requires that the principal beneficiaries of HG-supported activities be families below the median income. Section 4 describes the expected HG-eligible investments under the program.

The GOI has made investments under the HG program for projects which benefit lower income families. GOI's practice has been to allocate, as well, additional amounts from its own resources (exclusive of amounts financed by other donors) to HG-eligible purposes. Regular program monitoring has confirmed that the beneficiaries have been households below the median income.

An analysis of disbursements in FY 1991 found that about 2,300,000 low income people had benefitted from HG-eligible investments for the third tranche alone. Although it is not feasible to extrapolate from this one analysis to determine the overall number of beneficiaries of the program (since there is the likelihood of double-counting), it is clear that the nature of HG-eligible investments is such as to distribute program benefits very widely.

In addition to the benefits of direct investment in environmental infrastructure, benefits will also accrue to low-income households through four separate mechanisms:

1. Policy reform. As part of its analysis of priorities for programming in the urban sector, BAPPENAS has restated its concern that there is a need to accelerate the attack on urban poverty, particularly through programs that provide urban services for the lower income groups. Within the present project, the GOI will continue to support the development of appropriate mechanisms for the delivery of urban environmental services to these households. Other reforms intended to improve local management, facilitate private sector participation, and strengthen municipalities to finance and manage services, are expected to result in an improvement and expansion of services for the urban poor.

2. Increased service levels. The program will support the development of increased capacity for local governments to finance and deliver environmental infrastructure on a sustainable basis. Important components of the program will comprise support for development of the RDA and the further development of own-source revenues. The program will also move towards a rationalization of intergovernmental financial relations to encourage a more efficient use of government resources. These policy reforms will all enable municipalities to increase their service levels; implementation of the policy agenda will help ensure that these services are equitably targeted to lower income neighborhoods.

3. Improved environmental quality. Insofar as environmental deficiencies adversely affect lower income families more than those in higher income groups, and because the poor can less well afford to protect themselves against environmental pollution, the program's

emphasis on environmental quality management will necessarily improve conditions for below median-income households.

4. GOI program support. In addition to capitalization of the RDA, HG-eligible expenditures will also support GOI grant programs, which principally benefit lower income families through programs such as the Kampung Improvement Program (KIP). Given the general level of budgetary support to urban infrastructure programs, rupiah allocations to the DIP accounts will assist the GOI's efforts to provide lower income families with adequate services.

6.3.2 Impact on Women

Because of the role of women in society, present environmental conditions in residential areas in Indonesia's towns and cities, as described in Section 2.1.2, have a particularly severe impact on women. Conversely, improved delivery of infrastructure services, as targeted by the MFEI project, provides greater benefits to women and children than to the population at large. For instance, the provision of access to potable water and to improved sanitation directly benefits women in the following ways:

- Less time spent for drawing water for washing and cooking purposes
- Less possibility of contracting water-borne diseases (Diarrheal and other water borne diseases reduce life expectancy, cause loss of work opportunities, increase family care burdens, and reduce workers' productivity.)
- Less time spent caring for ill family members (Environmental improvements comprising improved solid waste handling and waste water disposal, and access to potable water typically reduce the incidence of diarrheal disease by 25 percent.)
- More time available for doing other productive work, including education activities
- Better environmental conditions in the place where they spent most of their time
- Less money spent on drinking water, medicines and visits to health centers
- Improved privacy and safety for women.

Improvement of access roads and paths, particularly in overcrowded settlements, also contributes to a reduction in gender-based violence.

The MFEI project will result in increased levels of construction and improvement of urban infrastructure, particularly water and sanitation, and more efficiently operated urban services. Women and children in the kampungs, which are the principal project areas, are likely to benefit most: the former from additional productivity, time and cost savings, and the latter because children are at special risk from water-related diseases.

Because women usually take primary responsibility for household and community management, they have a vested interest in clean water, sanitation and refuse services. Evaluation studies in other countries have shown, however, that their needs and advice are often ignored in local project design and implementation. This is typically not the case in Kampung Improvement Projects (KIP) in Indonesia, where women and women's

Policy Action Plan Monitoring Responsibilities

vill periodically monitor and report on specific statistical indicators which measure ss and impact of the Policy Action Plan and the government's decentralization n general.

indicators has already been developed, based on currently available, regularly d sources of information, and is presently designed to cover the six main policy ves of the Policy Action Plan. As new urban-related management information systems plemented, the data from these systems can be incorporated into the set of monitoring tors.

lly, these indicators will be refined and updated with the assistance of the MFP nical Assistance team, but will systematically be integrated into and managed by the I's own urban information system. Although the report will be updated as and when data come available, it will be published annually for use by the main ministries engaged in oan development.

he set of indicators, which presently describes planned outputs of the Policy Action Plan, vill be extended to cover the macro-economic objectives of the government's urban financing strategy. They may include, for example, integration of municipal credit markets with national capital markets, or the extent of utilization of market signals in the definition of urban investment programs.

With the assistance of the monitoring indicators report and the report of the sample beneficiary surveys (see below), Deputy V, BAPPENAS will prepare annual reports on progress/ accomplishments and identify implementation obstacles which may require modification in the Policy Action Plan. Deputy V, BAPPENAS will meet annually with the UPD to review progress and recommend Plan modifications, if any.

8.3 Investment Plan Monitoring

Section 223(j) of the FAA requires that HGs be for shelter or shelter-related activities (infrastructure) suitable for families below the median income. This monitoring process is intended to demonstrate the suitability of local currency expenditures (including RDA investments) for the shelter needs of below median income families, which also meet the criteria of this program as described in Section 4.

Investment Plan expenditures will be made through the DIP and INPRES Dati II grant system, on planning and environmental impact assessments, and the RDA. The Director of Program Development, Directorate General of Human Settlements, Ministry of Public Works (MPW), through Deputy V, BAPPENAS will provide annual reports on MPW-related investments made under the Investment Plan. The Director for the Management of

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In order to adjust these figures to reflect change in current income, the most practical measure is to use estimated growth in nominal GDP per capita. This will have averaged about 16 per cent a year for the period November 1989 to June 1992. The incomes quoted above will thus have increased by a factor of 1.4 by mid-1992. This adjustment clearly has many limitations, but is of the right order of magnitude to reflect both inflation and significant gains in output per capita over the post-survey period.

6.5 Country Risk Analysis

Indonesia's debt service ratio (DSR), public and private, after peaking at 39.7 percent in 1986, declined steadily to 27.8 percent in 1990. It rose again in 1991, to 30.1 percent, reflecting increased overseas commercial borrowing to fund investments in the country and the depreciation of the US dollar. According to the World Bank, the country's total external liabilities had reached about $78 billion by end-1991 -- an increase of 38 percent over the end-1989 level. This was a significant and unsustainable increase, and, in response, credit markets tightened Indonesia's access to external credit by raising spreads and shortening maturities for both public and private debt.

The seriousness of this debt position prompted the government to exercise strict control over further capital inflows to the economy (by a Presidential Decree of September 1991), whereby all projects involving state-owned banks or state-owned enterprises, funded by offshore capital, have become subject to scrutiny by a ministerial-level Team for Coordination of Offshore Loans. This measure has been taken, in combination with a two-year tight money policy, in an attempt to cool down the overheated economy resulting from the high growth of demand in 1989 and 1990.

On the positive side, the large inflows of foreign investments ($8.7 billion and $8.8 billion in 1990 and 1991 respectively, excluding investments in the financial and oil sectors), as well as domestic investments, are expected to increase the capacity of manufactured exports. Non-oil exports grew by 16.8 percent in 1989, and by a lower 8.3 percent in 1990 (primarily due to a declining trend in the world prices of primary commodities), before jumping by 24.9 percent in 1991. More importantly the share of non-oil industrial exports have risen steadily, from 48 percent of total exports in 1988 to 52 percent in 1991.

Given the strict limits on new external borrowing currently imposed on state-related external borrowing and the expected continuation of strong export growth (projected to grow by 20 percent in 1992), the DSR is likely to increase only slightly this year, before heading back on a long-term declining path.

GDP was estimated to have grown by 6.5 percent in 1992, similar to the 6.6 percent recorded in 1991 but below the rate of 7.4 percent in the previous two years. The Asian Development Bank projects that the economy will grow by 7 percent next year; and the World Bank predicts that the Indonesian economy will increase at an average rate of 5-6 percent annually between 1990 and 2000. On the assumption that the GOI will be able to

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8.4 Evaluation

Two evaluations of this project are planned over its life; they will be complemented with "assessments" to be undertaken at intervals of about one year. Both evaluations and assessments will be conducted by evaluators external to A.I.D. Funding for the evaluations and assessments will be provided from the evaluation line item in the MFP.

The first assessment will take place in early 1994, and an interim evaluation in mid-1995. The final evaluation is scheduled for late 1997, the precise date being contingent on the timing of the GOI's requests for A.I.D. to authorize additional guarantees. In those years in which formal evaluations are not scheduled, authorizations will be preceded by "assessments".

The overall objective of both evaluations and assessments will be to assess project progress and accomplishments, in terms of both Policy Action Plan implementation and Investment Plan expenditures. The evaluations and assessments will review the action items in the Policy Action Plan in terms of identifying benchmark accomplishments, emerging opportunities and obstacles. They will also propose changes to the Policy Action Plan, if required, to be incorporated in amendments to the Project Implementation Agreement. The Scopes of Work of both evaluations and annual assessments will include a requirement (1) to analyze the degree of "plausible attribution" to the MFEI Project of changes in policy and in levels of investment, and (2) to determine the appropriateness of the "progress indicators" discussed in Section 3.2.1 and their anticipated degree of change.

The formal evaluations will address issues of program sustainability, and the extent to which the benefits and achievements of the program can be maintained in the absence of further donor inputs. They will also encompass "lessons learned" reports, suitable for distribution to other donors, interested GOI officials, etc. The evaluations will conform in other respects to the A.I.D. requirements for evaluations, including assessment of progress towards meeting the development objectives defined in the project's log frame -- Annex A.

The interim evaluation will assess the continuing validity and relevance of the project to the GOI's urban policy objectives, and will address whether the implementation arrangements are the most efficient and effective to achieve the desired outputs. Findings will be used to help determine the need for modifications to the existing program, including revisions to project objectives, institutional arrangements and funding. It will be an important input into decisions concerning programming technical assistance for the remaining years of the project.

The final evaluation will review overall action plan implementation in relation to benchmarks achieved, as well as a review of Investment Plan expenditures in relation to eligibility under Section 221 of the FAA. This evaluation will also be used to determine whether the required actions have been carried out, whether performance has been consistent with expectations, and whether additional actions are needed to ensure the sustainability of project accomplishments. The evaluation will be keyed to the project outputs, purpose and goal as described in this Project Paper.

complete financing plan (RIAP) that covers the enhancement of local revenues and borrowing as well as support from the central budget and/or external donors; (4) plans (LIDAP) are also prepared for building the capacity of local government to assume ever increasing responsibility for infrastructure development, operation, and maintenance; and (5) individual city programs so defined are then reviewed at the province and central levels and decisions are made about the allocation of central loan and grant funds. Despite the many problems in implementation, IUIDP has generally been regarded as a major accomplishment.

Recent years have seen action to strengthen coordination and consultation in the urban development sector. The most basic step under this policy was the formal establishment of TKPP -- the inter-ministerial Coordinating Team for Urban Development -- in 1987, and the subsequent decree extending its responsibility for an indefinite period. TKPP was established to "insure synchronization of planning, financing and implementation of various urban development investments". TKPP consists of representatives at Director General level from BAPPENAS and the Ministries of Home Affairs, Finance and Public Works. Although there had been some concern during 1990 that it was losing some of its initial forcefulness, several steps were taken in 1990 and 1991 to strengthen TKPP institutionally. Most important, TKPP chairmanship was vested clearly with Deputy V (responsible for spatial development) in BAPPENAS. Second, the IUIDP Management Group (IMG), established to support of TKPP in IUIDP implementation, was strengthened through clarification of responsibilities and the establishment of regular meeting schedules. This group is made up of representatives at the Director level and handles day-to-day coordination of the investment program in response to guidance from TKPP, which operates at the Director General level.

Institutional issues are addressed by the Policy Action Plan, by setting targets for strengthening and clarifying local government responsibility for urban infrastructure; for strengthening and developing the IUIDP process, including the incorporation of urban environmental quality management into the process; for the consolidation of urban management guidelines for local governments, and the development of an indigenous system of training for local government staffs; and for strengthening intergovernmental coordination, monitoring and research.

6.7 Economic Analysis

6.7.1 Summary

The program will provide substantial direct and indirect economic benefits, far in excess of the costs of the HG loans. These benefits will accrue both from support of policy change and through direct investment in urban environmental infrastructure.

Estimated costs of the investment program to the GOI and to A.I.D. are given in Section 5. The estimated cost of the credit subsidy appropriations ($16 million) is about 13 percent of the total value of the loan guarantees ($125 million). The opportunity cost of capital in Indonesia is at least 15 percent. Thus, the GOI should be looking for returns on its rupiah investments in excess of 15 percent.

of expenditures, at least equal to the sum disbursed, which have been made to improve the shelter conditions of beneficiaries with below median incomes.

A condition precedent to the second and subsequent disbursements shall be that all conditions subsequent to prior disbursements shall have been met in full.

As explained in Section 2.2, authorization of HG tranches after the initial tranche will also be conditioned on the prior approval of the MFP amendment.

In accordance with credit reform legislation, the obligation of the "subsidy cost" of each guaranty must also be authorized as a component of each annual HG authorization.

9.1.2 Conditions Subsequent

Within one year after the disbursement of each loan guaranteed, or other such period as A.I.D. shall agree to in writing, the GOI shall account for Investment Program expenditures by submitting to A.I.D. reports certifying a list of expenditures, at least equal to the sum guaranteed and disbursed, and which have been made to improve the shelter conditions of beneficiaries with below median incomes.

The reason for this condition is to ensure the timely utilization of Housing Guaranty loan resources in compliance with FAA Section 223(j), which requires the use of housing guarantees for shelter or shelter-related infrastructure suitable for families below the median income.

9.2 Housing Guaranty Covenants

In addition to general covenants common to HG projects, the GOI will be asked to agree to assure:

- protection of the natural environment in areas where HG-eligible investments are taking place;
- development of systems which provide for operation and maintenance of facilities and infrastructure which are certified as HG-eligible expenditures;
- adequate coordination and management of the project; and,
- adequate coordination of the project with the related activities of other donors.

10. INITIAL ENVIRONMENTAL EXAMINATION

USAID regulations require that all projects be reviewed for the potential to cause significant negative impacts on the environment. An Initial Environmental Examination (IEE) is conducted, and followed, in appropriate cases, by more extensive assessments.

analysis, performed locally. Large subprojects have to go through a detailed standard Bank analysis, and are reviewed on a case by case basis.

Economic rate of return (ERR) calculations are required for medium and large subprojects in the water supply, roads and drainage subsectors. An ERR of 10 percent is used as the minimum cut-off rate. Most water supply subprojects had an estimated ERR of between 10 and 15 percent, and several road subprojects had an estimated ERR of 25 percent or more. The rate of return on piped water provided under the World Bank-financed Jabotabek Urban Development Project II was estimated to be about 12 percent.

Investments in settlement upgrading, which have comprised the greater part of investments made under the Investment Plan, usually have very high rates of return. An early World Bank analysis for KIP projects Indonesia found that the ERR varied from 20 to 70 percent. More recent work suggests that, although "these observations ... might well have overstated the benefits, ... the probability that kampung improvement has a high satisfactory positive economic benefit is very high". Another study for the World Bank found the rate of return on a particular project designed to improve the drainage of a high density, low income area which flooded several times a year to be 159 percent. However, because of methodological difficulties, the economic benefits of human and solid waste management and kampung improvement subprojects in Indonesia are now not routinely quantified: they represent least cost solutions to the problems of providing a basic level of service that is adapted to local needs and traditions.

6.7.3 Indirect Economic Benefits

Calculation of the ERR in environmental infrastructure projects as used by the World Bank and other international agencies traditionally has not captured full costs and benefits in terms of externalities. Those estimates of the ERR for water supply quoted above, for instance, base their calculations on consumer surplus as measured by willingness-to-pay models, and do not use models which estimate benefit from changes in property prices.

Annex D.5 looks at some of the other economic arguments for the program's support of investment in urban environmental infrastructure. These are: (1) that the lack of appropriate infrastructure constrains the pace and spread of economic growth by creating production and distribution bottlenecks; (2) that the lack of timely environmental infrastructure investment leads directly to environmental degradation that cannot be mitigated, and highly discounts future benefits in favor of current consumption; and (3) that inadequate infrastructure has very significant negative impacts on environmental health and social welfare that are often disproportionately biassed towards lower income groups.

Environmental infrastructure plays a fundamental role in economic growth. Indonesia is looking to non-oil and non-traditional exports, particularly the manufacturing sector, to act as its "engine" of growth. An adequate supply of efficient infrastructure promotes the production and distribution of goods by lowering industrial and commercial production costs. This can have important ramifications on a firm's competitiveness and productivity. Without

Program's Investment Plan. These annual reports will be provided to the Mission's Environmental Officer.

Regarding the property tax, total tax receipts during Indonesian fiscal year 1992 were just under Rp 1 trillion. Receipts from this tax have increased at an annual rate of 5 per cent (in real terms) over the last two decades. Given the significant potential for increasing revenue from this tax -- for instance, by raising the assessment or by lifting the rupiah cap on property valuation -- it should be possible to achieve annual increases far in excess of the historical trends.

Other benefits of policy reform are likely to include the following:

- Preservation or retarded depletion of non-renewable natural resources, especially water, due to the development and economic pricing of urban infrastructure and services.
- Increased effective demand for urban infrastructure and services, thus greater financial viability of such capital investments, due to decentralized planning and management of such projects.
- Decreased foreign borrowing due to the development of a sustainable credit system for financing local investments in urban infrastructure and services, as well as the utilization of previously untapped local revenue sources and private sector capital.
- Increased efficiency and competitiveness due to the development of more capable urban managers and municipal technical staffs.

In sum, the result of these spread effects will be to enhance investment in urban environmental infrastructure. If, as a result of the reforms identified in the Policy Action Plan, the level of investment were to increase by 15 percent a year, urban infrastructure investment would double in five years. Almost Rp.800 billion ($400 million) was invested in urban infrastructure in 1991/92; as a consequence of policy reform, this level could increase to Rp.1,600 billion a year ($800 million) by the end of the project period.

7. IMPLEMENTATION PLAN

7.1 Implementation Arrangements

Implementation of the project will be the responsibility of Deputy V, BAPPENAS, assisted by the GOI interministerial Coordinating Team for Urban Development. The Ministry of Finance will be responsible for the specific task of the HG borrowing, with the Director General of Budgets and the Director of External Funds taking the lead roles.

7.1.1 Project Coordination and Management

The same program implementation arrangements will be utilized as for the MFP, HG-001, as follows:

The GOI representative responsible for coordination and implementation of the MFEI project is Deputy V, BAPPENAS, who will be assisted by TKPP -- see Section 6.6.

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7.2 Contracting Plan

The contract agreements to be executed in conjunction with this project include the following:

1. The HG Program Agreement between A.I.D. and the GOI, specifying the procedures for borrowing, the programs/projects for the rupiah equivalent investment program and the jointly-agreed Policy Action Plan to be undertaken within the period of time covered by this Implementation Agreement.

2. The Loan Agreement between the GOI and the U.S. lender, stating the terms of the loan.

3. The contract of Guaranty between A.I.D. and the lender, stating the terms of the loan.

4. The Host Country Guaranty between the GOI and A.I.D., providing for an indemnity to A.I.D. in the event A.I.D. has to make payments on behalf of the borrower.

5. Paying and Transfer Agency Agreement between the Paying and Transfer Agent and the GOI for servicing the loan.

7.3 Implementation Schedule

The implementation schedule of important events is set forth below for the first two years of the project. The cycle described for July 1, 1993 to July 1, 1994 would be followed in subsequent years.

1993

June	A.I.D. approval of $125 million program. Authorization signed by A.I.D. for a $25 million Housing Guaranty for U.S. FY 1993 (497-HG-006).
June	GOI and A.I.D. meet to finalize agreement on the content of the Policy Action Plan.
June	Draft Housing Program Implementation Agreement prepared by A.I.D. for GOI review.

MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE

ANNEXES

A. Logical Framework
B. Policy Action Plan
C. The Investment Plan
D. Technical Analyses
   1. Municipal Credit and the RDA
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   3. Technical Assistance Requirements
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E. GOI Urban Development Policies
F. Summary of Interim Evaluation of Municipal Finance Project
G. Statutory Checklist
H. AID/W Guidance: PP Delegation of Authority
I. Initial Environmental Examination
J. GOI Request for Assistance

8. MONITORING AND EVALUATION

8.1 Monitoring Objectives

The project's monitoring objectives are:

1) to support and facilitate the GOI's demonstrated commitment to advance its urban development policy objectives (Policy Action Plan Monitoring); and

2) to ensure that the proposed HG assistance complies with the Beneficiary Below Median Income Test of Section 223 (j) of the Foreign Assistance Act (FAA) (Investment Plan Monitoring).

Monitoring and reporting will consist of several inter-related activities, including: a baseline survey of project beneficiaries; regular updating of this survey and of project monitoring indicators which have been developed and maintained by the MFP technical assistance team; quarterly reporting by USAID; and annual reporting, by the GOI and by external assessors.

8.2 Policy Action Plan Monitoring

The Policy Action Plan was formulated to assist the GOI in carrying out its policy initiatives in the urban sector. Monitoring the implementation of the PAP will be undertaken to support the GOI's demonstrated commitment to undertake difficult reforms.

8.2.1 A.I.D. Policy Action Plan Monitoring Responsibilities

USAID's Urban Policy Division (UPD) will have overall responsibility for monitoring the GOI's performance on the implementation of the Policy Action Plan. The UPD is in close and continuous contact with the TKPP secretariat and GOI officials responsible for Policy Action Plan implementation. The UPD will prepare quarterly status reports on the plan, identifying progress, accomplishments, emerging opportunities and obstacles. Suggestions on how to use technical assistance to address these opportunities/obstacles will be part of the reporting. The UPD reports will be provided to the Mission's Private Enterprise Development Office and the Mission's Project Committee. These reports will be used by USAID to facilitate discussion with the Steering Committee (see Section 7.2) and with key GOI counterparts.

UPD will also prepare periodic summaries of the project's progress for the USAID Mission Director, and for use by TKPP.

ANNEX A

LOGICAL FRAMEWORK

Onlending, Ministry of Finance, (Direktur Penglolaan Penerusan Pinjaman) will report on Investment Plan expenditures related to the RDA.

The Implementation Agreement will state the indicative amounts that are expected to be made through each of these channels over the lifetime of the project. Reports of expenditures through the DIP and INPRES systems will include actual expenditures made to date, by agency and by program. These expenditure reports will be issued by the Director of Program Development, Ministry of Public Works, through Deputy V, BAPPENAS. For RDA expenditures, these reports will include statements of disbursement, by recipient and project. Reports on RDA expenditures will be issued by the Director General of Monetary Affairs, through the Director for the Management of Onlending (DP3). The reports will confirm that all reported investments were in full compliance with the AMDAL (environmental impact assessment) process. The reports will be submitted to USAID by Deputy V, BAPPENAS through those respective ministries.

USAID's UPD will spot check the reported expenditures by examining file records of all disbursements made by the RDA, and will make field checks of randomly selected investments from all of those reported. These checks will verify that the randomly selected expenditures have been made, and that they are suitable for the HG target group as required by Section 223(j) of the FAA. The field checks will consist of periodic visits to a small percentage of the sites specified in the reports. For each of the investments subject to checking, the relevant AMDAL assessment documentation will also be reviewed.

The UPD will prepare reports documenting the verification measures it employed, and the results of each investment monitoring mission. Based on these monitoring missions, the head of the UPD will compile and maintain a list of approved expenditures by the GOI and report it back to the GOI by Project Implementation Letter (PIL). These PILs will be structured to show the amount of the HG-eligible expenditures approved by A.I.D. as of the date of the PIL. The UPD will take full responsibility for monitoring and reporting on the Investment Plan based on guidance provided by PRE/H and the cognizant General Counsel of the Office of Housing and Urban Programs.

The GOI, with the initial assistance of the amended MFP, will also undertake a baseline and subsequent periodic sample surveys of beneficiaries of its investments in urban infrastructure. These surveys will document the extent to which current programs directly benefit women and the urban poor. The information will be used (a) by the GOI to analyze policy options for more effective targeting of its investment programs to reflect its own poverty alleviation goals, and (b) by USAID to monitor the incidence of benefits from the HG-supported Investment Plan.

If, during the course of project implementation, the Investment Plan requires additions or revisions, the UPD will work directly with Deputy V, BAPPENAS in revising the Investment Plan and verifying the changes.

LOGICAL FRAMEWORK

Project Title: Municipal Finance for Environmental Infrastructure

02/10/93

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
PROJECT GOAL : THE BROADER OBJECTIVE TO WHICH THE PROJECT CONTRIBUTES			
	Measures of Goal Achievement		Assumptions for achieving goal targets :
1. Broaden access to basic services by facilitating the delivery of urban environmental infrastructure on a financially viable and sustainable basis.	1.1 An increase in the total level of investment in shelter-related environmental infrastructure.	1.1 Urban investment data as maintained by Cipta Karya and the SIKD information system developed under MFP.	1.1.1 Increase in HG resources are not off-set by decrease in GOI and other donor investments. 1.1.2 Other major donors (World Bank and ADB) will support the project purpose.
	1.2 Increase in the total population served by urban environmental infrastructure and services (water, waste water, and solid waste management).	1.2 BAPPENAS reports on progress of urban sector planning/investment and IUIDP process.	
	1.3 Extension of the benefits of environmental investment to the urban below-median-income population	1.3 Special household and related surveys to measure income distribution of service coverage from environmental investments.	1.3 Governmental investments will be more highly targeted on the urban poor.
PROJECT PURPOSE	EOPS :		
2. Assist the GOI to adopt an enabling framework for integrating urban environmental management within a system of improved, decentralized municipal finance and planning.	2.1. Increased share of central-local transfer payments under local government discretionary authority, as indicated by:		2.1 The GOI will continue to shift responsibility for the financing and planning of urban services/infrastructure to local government.
	2.1.1 An increased share of INPRES grants in total capital transfers from the central government to local governments, from the current 23% (91/92) to an EOPS of 30%	2.1.1 MFP Monitoring Indicators.	
	2.1.2 An increased district/municipality share of central government grants to local governments from the current 52% (91/92) to an EOPS of 60%.	2.1.2 MFP Monitoring Indicators	
	2.2. Improved performance of local governments in resource mobilization, as indicated by:		
	2.2.1 A continued year-on-year increase in real per capita own source revenues.	2.2.1 MFP Monitoring Indicators.	
	2.2.2 An increased share of user charges in local government own resource revenues, from 19% (1989/90) to an EOPS of 25%.	2.2.2 MFP Monitoring Indicators.	
	2.2.3 An increased share of property taxes in own source revenues, from 26% (1989/90) to an EOPS of 30%.	2.2.3 MFP Monitoring Indicators.	
	2.3. The private sector participates in a growing volume of environmental infrastructure investment and service delivery, as indicated by an increase in the value of non-housing urban services provided by private enterprises in a sample of municipalities.	2.3 PURSE baseline data in 9 municipalities and subsequent PURSE monitoring.	2.3 The GOI will encourage more private sector participation in financing urban investments.

In addition to the external evaluations and assessments, the establishment of the monitoring systems described in Sections 8.2 and 8.3 will assist in an on-going evaluation of the project. The UPD will prepare summary quarterly reports of project status, which will assist the external evaluators in fully documenting and assessing the project's policy impact.

8.5 Audit

HG investments are subject to audit by A.I.D. In order to minimize vulnerability, the Mission Controller will conduct periodic examinations of records and, as part of its financial review plan, will review GOI accounting procedures and documentation relating to their expenditures under the project.

Audit coverage will be performed by BPKP (Badan Pengawasan Keuangan & Pembangunan / Financial & Development Controlling Board) an independent auditing agency under the Government of Indonesia. BPKP routinely audits GOI donor-assisted development project implementation, especially the financial aspect of the projects. Their reports have been found to be adequate and reliable for A.I.D. control purposes. An audit schedule/plan will need to be prepared and discussed with the BPKP for the HG investment programs.

In addition, A.I.D. may utilize MFP project funding to obtain financial management technical assistance to assess and, where necessary, assist in upgrading the financial management systems of project counterparts.

9. CONDITIONS AND COVENANTS

9.1 Housing Guaranty Conditions

9.1.1 Conditions Precedent

In addition to the standard conditions precedent to A.I.D.'s guaranty of a disbursement, prior to each disbursement the GOI shall prepare (a) an Investment Plan which will list the estimated eligible expenditures in an amount equal to or greater than the rupiah equivalent of the disbursement, and (b) a report on the Policy Action Plan which describes its status in terms of benchmarks achieved and activities in progress, and a meeting will be held with A.I.D. to review the findings of the report. The reason for this latter condition is to ensure that A.I.D. is informed about GOI activities in implementing the Policy Action Plan and to help A.I.D. provide technical assistance and training support to the Policy Action Plan implementation process.

A further condition precedent to the first disbursement shall be that all conditions subsequent to disbursement of loans made under 497-HG-001 shall have been met in full. This will include a requirement that the GOI shall also have accounted for expenditures at least equal to the loans guaranteed under 497-HG-001, by submitting to A.I.D. reports certifying a list

LOGICAL FRAMEWORK

Project Title: Municipal Finance for Environmental Infrastructure

02/10/93

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
3.5 National guidelines are established and applied for sustainable pricing of environmental infrastructure services and for cost recovery targets appropriate for different types of environmental infrastructure.	3.5 Decrees and directives are issued for pricing environmental infrastructure based on model assessments of the cost effectiveness of alternative delivery systems for environmental service and investment priorities across sectors.	3.5 Ministry of Public Works, Home Affairs and Finance decrees and directives in progress.	3.6 Externalities associated with different types of environmental infrastructure services can be identified clearly enough to be reflected in appropriate service pricing policies.
3.6 Procedures are developed and implemented for incorporating environmental management concerns within IUIDP decentralized investment packages.	3.6 The environmental infrastructure management priorities identified in the above assessments are incorporated into an approved intergovernmental capital financing plan, for at least four cities.	3.6 BAPPENAS report on progress of urban sector planning investment and IUIDP process.	3.7 IUIDP process or its successors can be broadened to include environmental sectors not now covered. o Additional funding for technical assistance in support of MFEI policy agenda can be mobilized through an amendment to MFP or other sources.
3.7 Provision of shelter-related urban infrastructure, valued at the equivalent of $125 million benefiting below-median income urban families.	3.7 The rupiah equivalent of $125 million is spent by the GOI and local governments to provide shelter-related urban infrastructure for the urban poor.	3.7 Cipta Karya data on capital investment and sources of capital financing.	3.8 Policy and output targets of project are embraced in practice by BAPPENAS, Cipta Karya, and Ministry of Finance.
<u>INPUTS</u>	<u>Implementation Target (Type and Quantity)</u>		<u>Assumptions for providing inputs:</u>
4.1 US $125 million HG Loan.	4.1 US $125 million authorization over the six year life of project (1993 – 1998).	4.1 Program Agreement and Amendments.	o HG is authorized. o Amendment to MFP Technical Assistance is approved, substantially increasing level of funding and extending period of performance.
4.2 Technical assistance financed through MFP and PURSE.	4.2 Series of long and short-term technical assistance studies and training activities identified in the Policy Action Plan are carried out.	4.2 Project monitoring and evaluation.	o Timely completion of agreements with GOI. o Timely HG borrowing and disbursements.
4.3 GOI direct investment, grants, and capitalization of domestic credit facility.	4.3 GOI capital expenditures on urban environmental infrastructure through direct investment, grants, and domestically financed credit increase in real terms.	4.3 GOI expenditure records, supplemented by SIKD/MFP monitoring and special TA studies.	o Appropriately qualified TA will be available.

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There are two categories of activity promoted by this program:

1) Policy reforms aimed at improving the country's system of municipal financing of environmental infrastructure; and

2) Capital finance provided by the GOI for priority shelter-related urban environmental investments.

The first category of activities, policy reforms aimed at improving municipal financing of environmental infrastructure, is normally categorically excluded from further environmental review in accordance with A.I.D. Regulations Section 216.2(c)(1) (i) and (ii).

However, certain economic policies can have serious environmental consequences. Policy reforms intended to further urban environmental quality management and the provision of urban environmental infrastructure are an integral part of the Policy Action Plan. For this reason, the proposed project design for MFEI has been carefully reviewed to identify any proposed activity in which waste generation or water use might be subsidized and thereby lead to adverse environmental consequences. In addition, the Mission intends to monitor the Program's policy reforms in relation to environmental impacts. The review concluded that MFEI places a very high priority on monitoring and enforcement for all environmental infrastructure, as well as monitoring of its requisite policy reforms.

The second category of these activities is capital finance provided by the GOI for urban environmental investments. While A.I.D. will not directly select, design, locate or fund individual projects under MFEI, it will, as explained in Section 8.3, assure that all rupiah-financed projects attributed to this program by the GOI are in full compliance with the GOI's Environmental Impact Assessment (EIA) process, known as AMDAL. This process is similar to the U.S. EIA procedure in that an initial IEE is performed of all government-funded construction activities and that all such activities found to pose a potentially significant threat to the environment are then required to have a full EIA prior to beginning construction.

Since USAID/Indonesia considers the preparation of an EIA as an integral part of the project planning process and as it seeks to encourage adoption of environmental reviews at the earliest practical stage, it therefore proposes to permit expenditures on the preparation of EIAs and the monitoring and evaluation of compliance with those assessments to be included as a category of eligible expenditure under MFEI.

Considering these factors, Mission and Bureau Environmental Officers recommend a **Negative Determination** (Annex I) for the project. Potential environmental impacts of investments made by the GOI and included in the Investment Program will be assessed through the GOI's environmental impact assessment process, and monitoring and mitigation will be provided by the GOI as necessary. The Mission will monitor compliance with this provision through its annual monitoring of investments made by the GOI under this

ANNEX B

POLICY ACTION PLAN

B.1 Draft Policy Action Plan for MFEI

B.2 Status of Policy Action Plan for MFP

Municipal Finance for Environmental Infrastructure

ANNEX B1

POLICY ACTION PLAN

B.1 Draft Policy Action Plan for MFEI

Municipal Finance for Environmental Infrastructure

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ANNEX B.1

DRAFT UPDATED POLICY ACTION PLAN FOR MFEI

The following is the preliminary, draft text of a Policy Action Plan to be included in the 497-HG-006 Program Agreement. The text suggested below will be refined in detail and finalized with the GOI before being formally incorporated into the Program Agreement.

1. STRENGTHENING AND CLARIFYING LOCAL GOVERNMENT RESPONSIBILITY FOR URBAN INFRASTRUCTURE

Objective 1.1: Establish appropriate administrative status for urban areas.

Action 1.1: Identify new urban areas for classification as Kotamadya and Kota Administratip.

End-of-Project Target: Assignment of Kotamadya and Kota Administratip status recommended for all urban areas which meet the requirements laid down by laws and regulations.

Objective 1.2: Clarify responsibilities for urban environmental quality management, and the establishment of related standards and monitoring.

Action 1.2: Develop regulations and guidelines to clarify responsibilities for urban environmental quality management; establish and implement related standards and monitoring programs.

First Year Target: Regulations and guidelines drafted, and acceptance negotiated with relevant agencies.

End-of Project Target: Regulations and guidelines disseminated and being implemented.

2. IMPLEMENTING A COORDINATED AND DECENTRALIZED PROCESS FOR PROGRAMMING URBAN INFRASTRUCTURE INVESTMENT AND URBAN ENVIRONMENTAL QUALITY MANAGEMENT

Objective 2.1: Develop and implement local urban environmental quality management (UEQM) strategies and programs as a part of IUIDP implementation.

Action 2.1a: Develop guidelines for urban environmental quality management analysis, strategy preparation, project impact analysis and implementation. Modify IUIDP guidelines to reflect these activities as well as greater explicit analysis of consumer demand and willingness to pay as a basis for investment programming.

First Year Target: Complete guidelines, with limited dissemination to pilot/ demonstration cities.

End-of-Project Target: Complete demonstration strategies in 4 large or mid-sized cities; results used as basis for refinement of guidelines.

Action 2.1b: Develop urban environmental quality monitoring program.

First Year Target: Complete monitoring program design.

End-of-Project Status: Urban environmental quality monitoring routinely undertaken in larger cities.

Action 2.1c: Develop local urban environmental quality management programs associated with IUIDP program updates.

End-of-Project Target: Local urban environmental quality management strategies completed in conjunction with IUIDP PJM updates, and implementation satisfactorily under way in all cities with 1990 populations above 100,000.

Objective 2.2: Strengthen the management of IUIDP to improve the speed and effectiveness of program delivery.

Action 2.2a: Develop a practical management information system for monitoring IUIDP implementation.

First Year and End-of-Project Target: Information system developed and being used as the basis for management status tracking and corrective actions to expedite program delivery.

Action 2.2b: Prepare management studies of IUIDP processing at the provincial and central levels to identify bottlenecks and to recommend actions to streamline processing and assure effective program delivery.

First Year and End-of-Project Target: Studies complete; corrective actions taken, based on study recommendations.

3. ENHANCING LOCAL GOVERNMENT RESOURCE MOBILIZATION, FINANCIAL MANAGEMENT AND INVOLVEMENT OF THE PRIVATE SECTOR IN INFRASTRUCTURE AND SERVICE DELIVERY

Objective 3.1: Enhance local government resource mobilization.

Action 3.1a: Improve revenue collection under the property tax.

First Year Target: Increase property tax collections by 10 percent in real terms.

End-of-Project Target: Increase property tax collections by cumulative 10 percent per annum in real terms.

Action 3.1b: Improve cost recovery of local water companies.

First-year Target: Complete study of financial condition of water companies in larger cities and their capacity to finance future needed investment through borrowing.

End-of-Project Target: Reduce by half the percentage of water companies in cities over 100,000 population that have operating deficits. Increase by at least 60 percent the share of water company capital investment that is financed by borrowing or retained earnings.

Action 3.1c: Improve cost recovery of local solid waste collection services.

First-year Target: Complete study of revenue collection, service costs, and surplus/deficit of solid waste collection services in larger cities.

End-of-Project Target: Reduce by one-third the aggregate financial deficit in solid waste collection in cities with 1990 populations above 100,000.

Action 3.1d: Devise pricing strategies for water sector services (water supply, groundwater extraction, and wastewater collection, removal and treatment).

First-year Target: Complete study of current pricing of water-related services in larger cities, and of social, economic and environmental factors that need to be incorporated into price-setting decisions.

End-of-Project Target: Complete economic and financial analysis of appropriate pricing strategy for water-related services; issue guidelines for setting appropriate prices; incorporate incentives in national financing mechanisms for local water sector enterprises to follow the guidelines.

Objective 3.2: Support private sector participation in environmental infrastructure and service delivery

Action 3.2: Identify and support implementation of local public sector actions and investments that facilitate private sector involvement in environmental infrastructure and service delivery.

First-year Target: Identify four pilot cities and appropriate local public sector actions and investments to support private sector participation in service delivery.

End-of-Project Target: Carry out indicated investments and public sector support activities in pilot cities.

4. ESTABLISHING EFFECTIVE MECHANISMS TO SUPPORT MUNICIPAL BORROWING, AND IMPROVING THE SYSTEM FOR ALLOCATING INTERGOVERNMENTAL GRANTS

Objective 4.1: Support development of the RDA as a transition vehicle that facilitates market-based lending to local governments and integration of municipal credit into the private financial sector.

Action 4.1a: Carry out an external evaluation of the RDA's operations capacity, its working relations with local governments, capitalization policy and collections record.

First Year and End-of-Project Target: Carry out evaluation.

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Action 4.1b: Prepare a 5-year institutional development plan for the RDA.

First Year Target: Prepare plan, begin negotiations for agreement.

End-of-Project Target: RDA is implementing agreed plan.

Sub-objective 4.11: Establish a system for maintaining the creditworthiness of RDA borrowers.

Action 4.11a: Support mechanisms for evaluating the creditworthiness of municipalities applying for RDA loans.

First-Year Target: Prepare analysis of institutional and procedural options for determining municipal creditworthiness.

End-of-Project Target: Mechanisms are in routine use.

Action 4.11b: Support procedures for imposing sanctions on municipalities that are in arrears on RDA loan repayments, including refusal of new RDA loans.

First-Year Target: Prepare study of how alternative systems could function, utilizing experience in other countries.

End-of-Project Target: Policy incorporated in Operations Manual and applied in practice.

Action 4.11c: Establish routine disclosure of local government borrowers under RDA, terms of loans, and repayment records.

First-Year Target: Prepare and publish list of RDA loans, loan terms, repayment record to date, and any forgiveness of loan amounts or modification of original loan terms.

End-of-Project Target: Routine preparation and publication of above information on a semi-annual basis.

Sub-objective 4.12: Institute a system for domestic capitalization of RDA.

Action 4.12: Support procedures for capitalizing the RDA, including reflows of outstanding loans under RDA management, GOI resources and private market borrowing.

First Year Target: Prepare study of options for capitalization of RDA.

End-of-Project Target: GOI has contributed own-source resources to RDA capitalization, in addition to donor resources. Part of repayments from past loans retained within RDA as capitalization of new loans. Agreement reached on a strategy for private market capitalization.

Sub-objective 4.13: Encourage the establishment of alternative mechanisms for the mobilization of domestic credit for local government financing of urban infrastructure.

Action 4.13a: Explore alternative short-term and long-term mechanisms to mobilize domestic credit for local government financing of urban infrastructure investments (e.g. municipal bonds).

First Year Target: Describe existing options available to municipal governments; analyze other options for mobilizing domestic credit; prepare an action plan.

End-of-Project Target: At least one municipal bond has been issued.

Action 4.13b: Prepare an action plan for the implementation of alternative means of integrating municipal credit into the private financial sector.

First Year Target: Prepare study and recommendations of how private financial institutions can participate in lending to municipalities (for example, as retail lenders who sell a participation in loans to the RDA).

End-of-Project Target: Guidelines issued and in use, based on consultation with municipalities, RDA and potential private sector lenders.

Objective 4.2: Improve the system for allocating intergovernmental grants.

Action 4.2: Prepare a study of how incentives can be built into the grant structure and the system for allocating grants, to encourage targeting of grant funds to activities most appropriate for central-level subsidy: (a) investment packages for poor regions; (b) investment projects that benefit low-income households; (c) investment projects that generate high degree of externalities.

First Year Target: Describe current targeting policy; carry out study.

End-of-Project Target: Implement principal recommendations of study to improve targeting of grants.

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5. STRENGTHENING THE INSTITUTIONAL CAPACITY OF LOCAL GOVERNMENTS

Objective 5.1: Develop coordinated system of urban management guidelines for local governments.

Action 5.1a: Complete an inventory and analysis of all existing laws, regulations and guidelines issued by central government ministries/agencies which are relevant to urban management at the local level.

First Year Target: Complete inventory and analysis.

Action 5.1b: Design new system of guidelines for local urban management, including urban environmental quality management and incorporation of the role of the private sector, and modify existing laws and regulations as required for its implementation.

End-of-Project Target: Complete design of principles and structure of new system; laws and regulations modified as needed to implement new system of guidelines for local urban management.

Objective 5.2: Develop indigenous self-sustaining system of training and technical assistance for local governments in urban management.

Action 5.2a: Design urban management training and technical assistance system and negotiate with providers as a basis for implementation (including general urban management, financial management, service delivery management, capital investment programming, and spatial planning and urban environmental quality management).

First Year Target: Complete system design and reach final agreements on implementation.

Action 5.2b: Implement urban management training and technical assistance system.

End-of-Project Status: Prototype training courses have been given and evaluated. System being implemented nationwide.

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6. IMPROVING INTERGOVERNMENTAL COORDINATION AND CONSULTATION IN URBAN DEVELOPMENT

Objective 6.1: Continue the operation of TKPP in program coordination, monitoring, and policy development.

Action 6.1: Hold TKPP meetings at least on a quarterly basis, with agendas that entail reviews of regular progress reports, the formulation of new tasks and corrective actions in relation to those review, and the revision of program plans in response to changing needs and conditions.

First Year Target: At least four TKPP meetings conducted, with reports completed on meeting content and decisions taken.

Objective 6.2: Strengthen central monitoring and research support to facilitate decentralized urban development and targeting of government investments.

Action 6.2a: Develop national system of urban monitoring indicators.

First Year Target: Select indicators and establish data base.

End-of-Project Target: System operational, with regular reports prepared and disseminated to TKPP agencies and Tk. I and II governments.

Action 6.2b: Develop urban research agenda to be supported by internal and external technical assistance.

First Year Target: Initial research agenda complete and first group of analyses initiated.

End-of-Project Target: Major policy analyses of urban development problems and opportunities complete and disseminated.

Objective 6.3: Develop national level urban environmental awareness program.

Action 6.3: Design and implement national awareness and education programs concerning the urban environment and natural hazard phenomena.

First Year Target: Complete program design.

End-of-Project Target: Program elements being implemented.

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ANNEX B2

POLICY ACTION PLAN

B.2 Status of Policy Action Plan for MFP

Municipal Finance for Environmental Infrastructure

POLICY ACTION PLAN – HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring indicators
1.	Strengthen Local government responsibility for urban infra-structure development, operation and maintenance. Define and classify urban infrastructure and assign functional and financial responsibilities for planning implementation, operation and maintenance to Central, Level I and II governments.	1.01	Classify designated urban infrastructure in all kotamadya's and assign functional responsibilities (1987–1991)	Assign working group that would define classification policy (by Tim Koordinasi–TK); agencies to carry out classification (by DGEM, DGKEL, DGCK, and DGPUOD)	* assign working group and provide TOR	Completed (11/87)	Working group assigned and agreed TOR
					– formulate urban service inventory and classification policies and work-plan to address all Kotamadyas	Completed (12/87)	Functional classification
					Complete surveys and classification in 10 cities	Completed (10/88)	Agreed classification maps and inventories
					Continue rolling program of classification in remaining cities (Kotamadyas and urbanized Kabupatens)	Being implemented (90–92)	Agreed classification maps and inventories
							Bitung (1990), Denpasar (1992) & other Kotips. (including 5 provincial capitals) upgraded to Kotamadya
					* MPW & MHA Joint Decree (14/1987) assigned responsibility for water, wastewater & solidwaste to local government.	Completed (/87)	
		1.02	Define institutional responsibilities for traffic management in urban areas (1987–89)	Study and assign responsibilities for traffic management and policy coordination (by TK, DGBK, DGLT, and DGPUOD)	– Define issues and workplan for resolution	Completed (10/87)	Agreed workplan
					– Assign working group	Completed (01/89)	Working group assigned
					– Assign phased responsi-bility to selected Level II cities	Being Completed **(/90)	Decree assigning local government responsibility for traffic management & authority for vehicle tax.
					– Transport & traffic planning & budgeting included in PJM guidelines/road classification system coordinated with budgeting		

POLICY ACTION PLAN — HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium–term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
3.	Strengthen Local Government resource mobilization and financial management:						
	(a) Improve PBB performance, local tax performance, and services charge performance	3.01	Fully implement PBB tax law (1986–96)	Improve revenue performance of Property Tax (PBB) through technical and management improvement programs.	* Appoint Valuation Advisers to develop a Valuation Methodology for top value properties and supervise the valuation process on Jakarta, Surabaya, Medan, Bandung and Denpasar.	Completed (89–91)	Valuation advisors appointed to assist PBB in individually valuing high value properties, develop a computer assisted valuation model (CAV) and train valuers. A total of 200 000 properties valued. A prototype CAV was developed Twenty PBB officials were sent for overseas training and many PBB officials underwent in–country training.
					– Extend top properties valuation methodology to 30 other cities	Completed (91–92)	Valuation advisors were appointed to supervise implementation. A total of 70 000 additional properties valued in 30 other cities.
					– Appoint Tax Administration Advisors to assist PBB in improving Property Tax Administration and policy issues.	Completed (89–92)	Tax Administration advisors appointed to assist PBB in designing a collection–led implementation strategy for tax reform. This collection–led strategy involved developing and supervising the implementation of the Payment Point System (SISTEP) and the Collection Monitoring System (SISLAP). The SISTEP system was successfully implemented in Kabupaten Tangerang in 1989 and subsequently replicated to 83 regional governments by 1991/92. As part of the SISTEP system, strict enforcement has been stressed. Total Property Tax Collection for the rural and urban sectors has improved from US$ 117 million in 1988/99 to US$ 164 million in 1991/92.
					– Decision to Replicate Implementation	On–going (92–93)	One hundred more cities will be incorporated to SISMIOP operation during 92/93.

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POLICY ACTION PLAN – HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
					* Develop a comprehensive Property Information Management System (SISMIOP) to integrate the property administration functions of property data collection, valuation, assessment, collection (e.g., SISTEP), enforcement and taxpayer service (appeals and objections).	On-going (91–93)	SISMIOP pilot project established in Kabupaten Bekasi, East Jakarta and South Jakarta. The pilot project has tested improved procedures for assigning tax object identification numbers (NOP), collecting property information and the development of computer-based SISMIOP components. The property information collected will be used to evaluate and finalize the property valuation methodology for Indonesia by mid-1992.
		3.02	Improve revenue performance of local taxes and service charges (1987 onwards)	Improve the structure of local taxes and charges (by DGKDN and DGPUOD)	* Draft legislation "Law on Local Government Taxes & Charges" and "Central-Local Fiscal Relationships" prepared by MOF under review by cabinet.	Pending Review (/92)	
				Implementation of local tax office procedure improvements (by DGPUOD)	Evaluate pilot tax office improvement (MAPATDA) in Urban IV (Loan 1972-IND) cities	Completed (90–91)	Evaluation report
					MAPATDA manual system of local tax administration improvements expanded to all TK. II gov'ts	Completed (90–91)	Increase in Own Source Revenue (OSRs) reported by MFP Monitoring Indicators
					Computerization of MAPATDA Manual System tested in 20 TK. II gov'ts	Being implemented (/92)	
	(b) improve management and supervision systems of local enterprises capabilities	3.03	Improve cost recovery and management of all regional enterprises (1987 onwards)	Improve user charge/cost recovery performance of PDAMs in Java (by DGCK and DGPUOD)	* Analyse cost recovery performance of all water enterprises subject to SKB 4/84-37/KPTS/84 and identify problem PDAMs	Completed (09/87)	Improvement action plan recommendations
					* Implement, commencing in Java and Sumatra, the adoption of:		
					(i) water tariff structure and appropriate tariff level to cover O&M costs, depreciation of debt service (whichever is larger) and	Completed (09/89)	No. of water enterprises complying (30 PDAMs)

POLICY ACTION PLAN — HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring indicators
		1.03	Develop program responsibilities for local governments in integrated Urban infrastructure program (IUIDP)	Application of IUIDP processes to urban infrastructure services including raw water supply, flood protection, urban roads, water supply and sanitation, solid waste management, drainage and KIP (by TK, MPW, and MHA)	* Issue directives of MPW agencies to apply IUIDP processes in urban infrastructure planning	Completed (08/87)	Directives issued
					* Issue directives to Level I and II local governments to adopt IUIDP process approved by TK	Completed (08/87)	Directives issued
2.	Integrated expenditures planning and programming improvement (a) local governments to prepare investment plans on basis of guidelines from Central Government (b) financial support of local governments to be based on local capabilities and needs (c) emphasis to be given to MPW provisions and low-income group needs	2.01	Develop and refine IUIDP planning	Develop & implement guidelines for non Cipta Karya subsectors within MPW as well as Cipta Karya sub-sectors and issue updated guidelines for all sub-sectors from time to time including multi-year financial information (by TK, MPW, MOF and MHA)	– Develop multi-year program alternatives	Completed (12/89)	Projections issued
					* Issue periodic updates of IUIDP guidelines	Ongoing **(08/90)	Revised PJM guidelines completed. Being issued by MOHA
						Being implemented (91–92)	90 PJMs completed by early 1991, covering 40% of total urban population, 116 PJMs in progress. 81% of urban population will be covered by PJMs now complete/in progress.
					– Manuals issued for RIAP & LIDAP development	Ongoing (92–93)	RIAPs & LIDAPs prepared for 11 level I & 55 level II governments under IBRD E. Java & Bali UDP, ADB Sumatra & W. Java SCUDP, and elsewhere.
					– IUDP pilot project incorporates linkage to economic potential in IUIDP process for E. Bandung, Kabupaten Karawang (W. Java) and 2 Kodya in Sumatra.	E. Bandung being implemented (3/92)	E. Bandung & Sumatra IUDP's completed
					– Further improve, pilot test and replicate PAFPACK.	Ongoing (88–)	Pilot tested in Surabaya (88–88). Pilot test expanded to 9 TK II gov'ts (89–90) and 27 TK II gov'ts (90–92).
					– Program Financial Accounting and Management System (PFAM) designed to improve monitoring of IUIDP expenditures	Design Completed (/91)	
					– PFAM tested in East Java/Bali UDP and Sulawesi/Irian Jaya UDP.	Being implemented	System implemented in 9 Tk I and 44 Tk II local governments.

POLICY ACTION PLAN – HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives	Medium–term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
				(ii) BKPK (Audit Agency) Accounting Guidelines for PDAMs established for tracking operational costs, debt service, depreciation allowance, etc.	Completed (/91)	No. of PDAMs adhering to BKPK accounting guidelines
				– MFP conducted analysis debt management	Being Completed (06/92)	
			Assign water enterprises monitoring and development functions to PMDU's throughout Indonesia (by DGCK and DGPUOD)	* Assign functions and provide budgets and staff to Central and West Java PMDU's	Completed (01/88)	Directives issued and units operational in Java
				– Appoint consultants to (i) assist PMDUs and (ii) assist water enterprises	Completed (07/88)	Contract signed
				– Pilot test & fully implement system of Provincial Monitoring Development Units (PMDUs).	Being implemented (92–)	No of provinces with PMDUs established as a result of extension of pilot system: PMDUs have been established in all provinces except Irian Jaya, Timor Timur & DKI Jakarta
				– Water Enterprise Management Information System (WEMIS) at DGCK for financial & technical data on BPAMs & PDAMs, supported by PMDUs.	Installation Completed, Not all BPAMs & PDAMs reporting data yet.	PDAMs to report financial as well as technical data thru WEMIS.
				– PDAM Financial Monitoring System by PUOD under MFP amendment.	Proposed (92–93)	
				– Management TA/training to PDAMs under MFP amendment.	Proposed (92–93)	
			Review optional water enterprises organizational arrangements for all provinces based on efficiency criteria by TKPP	– Formulation of TOR	Completed (12/87)	Agreed TOR
				– Appointment of consultants	Completed (01/88)	Contract extention signed Java provinces structure defined; implementation timetable agreed
				– Complete review of recommendations for initial implementation in Java	Completed (01/88)	

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Actions, Keysteps, targets, updated April – June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
					– BPAMs upgraded to PDAMs status as a result of GOI technical assistance & training	Being implemented	No of BPAM–PDAM conversions (By 1992 131 BPAMs & 177 PDAMs)
				Develop guidelines for restructuring, privatizing or liquidating BUMDs (Local gov't Enterprises)	– Formulate TOR for BUMD inventory & regulatory guidelines study	Being implemented (04/92)	Agreed TOR by PUOD
					– Complete BUMD study and plan for rationalization under MFP amendment.	Proposed (92–93)	Study results approved by GOI
	(c) Improve local government financial management capabilities	3.04	Improve financial management capacity in all TK. I & TK. II. gov'ts	Initial design/pilot tests of financial management & MIS packages under IBRD Urban IV, V & USL1 (SPMKD, POMMS, PAFPACK, SIKDD, MAPATDA).		Completed (84–89)	
				Develop framework resolving conflicts & filling gaps between various financial mgm't & mgm't info systems designed/piloted under IBRD Urban IV, V & USL1.	– Prepare written guidelines based on MOF–MHA seminar to review pilot experience with financial & mgm't info systems.	Completed (12/90)	MFP Seminar Technical Report. PUOD strategy/ action plan.
					– Establish Central Technical Unit (CTU) in PUOD to revise & integrate financial mgm't systems based on Seminar Technical Report	To be implemented (92–93)	Tendering package issued/ Contract Award/Systems redesign & installation. E. Java & Bali UDP funding, MFP supervisory support.
				Expand Performance Oriented Maintenance Management System (POMMS)	• POMMS designed and tested in 8 cities	Completed (89–90)	
					• Extend POMMS to 10 cities under E. Java & Bali UDP	Being implemented (92–)	
				Develop a consolidated, coordinated and controlled system of Urban Management guidelines for use by Tk. II governments	– Overview of existing laws/ /regulations/guidelines by TKPP and Draft Strategic Plan for Urban Management in Indonesia.	Completed (01/92)	
					– Initial Phase of UMG Development (detailed inventory, analysis, action/plan & TOR TOR development) being contracted under MFP.	Completed (02/92)	
					– Full UMG implementation under MFP Amendment.	To be Determined	

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Actions, Keysteps, targets, updated April – June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
(d)	Encourage private sector resources mobilization and private sector participation in the provision and delivery of urban infrastructure services	3.05	Establish an acceptable legal and regulatory frame work for private sector involvement in the financing, implementation, operation and management of urban services and infrastructure	Assign working group to define and encourage the role of the private sector (by TKPP)	– Assign working group and provide TOR	04/90	Working group assigned and TOR agreed. Private participation on water supply guidelines by MPW.
					– Assign responsibility for preparation of guidelines by TKPP working group	08/90	Responsibility assigned
				Provide guidelines for appropriate forms of private sector participation in each selected sub-sector (by MPW)	– Private Sector Participation Identification Study (First E. Java Water Supply Project – IBRD Loan 2275-IND).	Completed (12/89)	
					– Prepare TOR for appointment of consultants	08/90	TOR prepared
					– Appoint consultants	08/90	Consultants appointed
					– Recommendations to be discussed by Workshop	11/90	Workshop held
					– Working group prepare its recommendations		
					– "Financing & Commercializing the Private Provision of Public Services" study describing elements of needed policy framework, evaluation criteria & negotiating parameters common to all subsectors of public-private partnerships.	Completed (03/91)	
					* WASH study of private sector participation (PSP) in urban water supply & draft admin guidelines for PDAM's.	Completed (05/91)	
					* WASH seminar held to disseminate study findings on next steps for GOI	Completed (05/91)	
					* PURSE project designed & approved to mobilize TA to undertake policy studies, develop guidelines, & test findings thru pilot projects.	Being implemented (91-97)	

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Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives	Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring indicators
				– Preliminary surveys in Padang & Surabaya & TOR prepared by MFP for detailed survey of PSP in Urban Service at the local gov't level (study to be financed by PURSE).	Completed (02/92)	
				– BOO/BOT Seminar overview of PSP & power, telecom, & toll road subsectors.	Completed (02/92)	
			Determine the rights and obligations of the private sector by providing appropriate model agreements between local authorities and participating private sector establishments (by MPW and MHA)	Provide model agreements between local authorities and the private sector concerning a variety of forms of private sectors participation		Model agreements provided
			Introduce pilot projects in selected local authorities, authorities, with initial emphasis on the water supply and solid waste subsectors (by MHA)	– Umbulan Springs, Pasuruan, E. Java bulk water supply for PDAMs of Surabaya, Gresik, Sidoarjo & Pasuruan BOT–type contract signed Bromo Consortium $125 million 15–yrs 1990.		
				– Lhok Seumawe, Aceh Utara water supply, transmission, & distribution to industrial (80%) & non–industrial (20%) users. American, Dutch, & local investors & 70 million 30–yrs 1990.		
				– Nusa Dua, Bali Water supply & distributions for hotel development approx $15 m (private)/$9 m (public) 15 – yrs(1991)		
				– Bintan Islands water supply Singaporean company Salim group $480 m under negotiations, Singapore Public Utilities Board and Riau province PDAM.		

POLICY ACTION PLAN – HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives	Medium–term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
				– Semarang $125 million water treatment & distribution system under negotiations.		
				– Solid waste collection & transport service contracts by private firms serve 10% Jakarta's 261 sub–districts in 1988. In Surabaya private firms transport 19% of the city's solid waste from temporary collection to final disposal sites.		
				– For electric power generation, the GOI is reviewing BOO–type proposals from 2 consortia for Paiton 5&6 and 7&8 power plants, each pair 1200 MW $1.7–2 billion.		
				– In telecommunications, the GOI seeks to establish revenue sharing agreements (build–transfer type contracts) with domestic firms for 490,000 of the country's 1.4 million lines. As of Sept. 1991, 53,000 lines put into operations under revenue sharing agreements. Broad deregulation under review.		
	3.06	Develop appropriate conditions to achieve the level of cost recovery required to motivate private sector investment in public services and infrastructure	Investigate policy options in relation to the main forms of private sector participation to ensure acceptable levels of return on investment, while safeguarding the interests of the general public (by MOF, MHA, and MPW)	– Tk. II Loan Administration Study by PUOD on debt service, depreciation, demand analysis, & methods for increasing tariffs to attract private investment	Completed (91–92)	
				– Pilot test Tk. II Loan Administration Monitoring System & provide training to 5 PDAMs.	Being implemented (92–93)	

POLICY ACTION PLAN – HGL

Actions, Keysteps, targets, updated April – June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87 – 04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
4.	Improve financing systems and mechanism for urban infrastructure and incentives for local resources mobilization	4.01	Provide a viable system of loan finance for local governments (1987 onwards)	Strengthen Central-local Government borrowing scheme (by DGMDN)	* Assign consultants to review policies for the Regional Development Account (RDA)	Completed (03/89)	Consultants assigned
	(a) create a consolidated loan fund for local governments				* RDA Decree signed by MOF formalizing credit facility	Completed (09/91)	
					* RDA Borrowers Manual Prepared	Completed (01/92)	Copies disseminates to Provincial & selected Kotamadyas
					* Decree signed setting RDA interest rate for 1992	Completed (02/92)	
					– Workshop on Local Gov't Debt Mgm't held in Malang by MFP/MOF to review RDA procedures.	Completed (02/92)	
					– MOF/HIID Local Gov't Project Appraisal course established.	Completed (/91)	
					– SPABP mechanism established to allow donor funds to be channelled directly to local gov'ts thru INPRES grants with linkages to approved IUIDP PJM's.	Completed (/91)	
	(b) improve grant allocation criteria	4 02	Improve allocation mechanisms of grant finance (1987-89)	Improve allocation criteria and guide-lines for Central – Local grant system (by TK)	* Assign working group	Completed (06/87)	Working group assigned
					– Review recommendation of on-going Central – Local grant system	Being Implemented **(/90)	Working group report with specific improvement proposals
					– Prepare instruments required for improvements in Central Local fiscal relations	Pending Review (/92)	Draft legislation "Law on Local Government taxes & Changes" and "Central-Local Fiscal Relationships" prepared by MOF under review by Cabinet.
					– Experimental Inpres Perkotaan established for FY 1992/93 for Rp. 36 billion, as part of Inpres Dati II.	Completed (/92)	

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Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring indicators
		4.03	Improve information base for policy development and operational decisions on local government finance	Improve system of Tk. I & II reporting to MOF & MHA (PJOD) for APBD Local annual budget/actuals.	– SIKDD financial & demographic system pilot tested in Semarang under Urban V.	Completed (/90)	
					– SIKDD pilot system upgraded by SIKD financial reporting & monitoring system at PUOD and local gov'ts with support from MFP.	Being implemented (92–93)	
				Improve information base for mobilization of local resources.	– Land Information Management System (LIMS), supporting land registration & property tax collection pilot tested in Semarang.		Next steps for adaptation of LIMS elsewhere to be determined.
				Improve information base required by Central Gov't to prepare policies & programs and monitor local gov't performance.	* Regional finance information & analysis system (PAKDBASE) installed and tested at MOF/PAKD. Integrated with SIKD by MOF/MFP.	Being implemented (92–)	
					– Urban Policy Action Plan Monitoring Indicators System designed & installed by MFP	Being implemented (92 – 93)	Monitoring Indicator System fully institutionalized.
					– MFP Municipal Finance Seminar assessed strengths & weaknesses of various MIS, including National Urban Development Strategy (NUDS) database & Urban Information System (UIS).	Completed (12/90)	Action on MFP Seminar recommendations
	(c) Utilize central–local development grant funds with appropriate attention being paid to the requirements of low-income households.	4.04	Develop a system for the identification of target groups for poverty alleviation programs and for channelling financial and technical assistance to the target groups and for monitoring and evaluating the effectiveness of such programs.	Assign a working group to define policies in relation to poverty alleviation (by TKPP). Determine criteria for the identification of low income target groups, the number of such households and their distribution by province and local authority (by DGCK and DG BANGDA)	Assign working group and provide TOR	09/90	Working group assigned and TOR agreed
					Working group to prepare TOR forappointment of consultants	06/90	TOR prepared
					Appoint consultants	09/90	Consultants appointed
					Hold workshop on poverty alleviation	09/90	Workshop held
					Agree criteria for the identification of target groups	10/90	Criteria agreed

POLICY ACTION PLAN — HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium-term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring Indicators
				Determine the grant requirements of the alleviation packages and the spatial distribution of such requirements (by DGCK and MOF).	Agree on appropriate poverty alleviation packages and their grant/loan implications	10/90	
				Identify the appropriate channels for the delivery of poverty alleviation packages (on-site sanitation, community water supply, house improvement, etc.) within the IUIDP framework (by DGCK and DG BANGDA)	Agree on channels for delivering poverty alleviation packages including guidance requirements monitoring and evaluation	03/91	Channels for delivery agreed (See Inpres Perkotaan under 4.02)
5.	Improve local government capabilities: (a) evaluate Local Government needs, with particular emphasis on urban managers and coordinate long-term training programs	5.01	Strengthen Local Govt. institutions responsible for urban infrastructure	Carry out a comprehensive study of urban institutional and manpower development needs of local governments (by MHA and Civil Service Administration Agency – BAKN)	– Urban Institutional and Manpower Development Study (UIMDS) needs assessment.	Completed (/88)	
					– UIMDS Seminar by MFP to communicate findings & recommendations.	Completed (03/91)	
					– UNDP consultancy support for institutional development in MENPAN, LAN and BAKN.	Being Implemented (/92)	
					– "A Training & Technical Assistance Delivery System for Urban Management: A" Preliminary Note in Strategy by MFP/IUIDP–INS.		
	[illegible] local revenue administration, planning and programming, and operations and maintenance	5.02	Strengthen management and staffing capabilities in MPW DGs and Provincial Dinas PU, to provide guidance to local governments (1987–1989)	Review coordination arrangements between MPW DGs in IUIDP process	Issues directives to DGs	Being Implemented **(10/90)	Directives issued
					MPW staff "deconcentration" and "secondment" to support TK. II.	Completed (/90)	
					– Manual for IUIDP preparation distributed for use in East Java/Bali	Completed (04/92) UDP	
					– Manual for IUIDP appraisal	Being Implemented (/92)	
					– Workshops to explain manual guidelines	Being Implemented (/92)	

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POLICY ACTION PLAN — HGL

Actions, Keysteps, targets, updated April–June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives		Medium–term goals	Action Proposed	Key steps during project period (04/87–04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring indicators
				Identify staff skills and training experiences required to provide adequate management, technical and financial advice to Local Govts. (by MPW, MHA and MENPAN)	– Carry out internal review of DGCK with assistance of management consultants	Being implemented **(/90)	Assessment finalized
					– "A Training & Technical Assistance Delivery System for Urban Management: A" Preliminary Note in Strategy by MFP/IUIDP–INS.	Completed (02/92)	
	(c) provide guidance to all govt. units in coordination of urban development	5.03	Remedy conflicts and inconsistencies among existing laws and regulations on urban management	Develop a consolidated, coordinated and controlled system of Urban Management guidelines for use by Tk. II governments.	– Cursory inventory of existing laws/regulations/guidelines by TKPP and Draft Strategic Plan for Urban Management in. Indonesia.	Completed (01/92)	
					– Initial Phase of UMG Development (detailed inventory, analysis, action/plan & TOR TOR development) being contracted under MFP	In progress (1992/93)	
					– Full UMG implementation under MFP Amendment	To Be Implemented	
				New guidelines provided by new legislation.	– Draft Spatial Planning Law provides plan preparation guidelines and protected area controls	Under Review	Submitted House of Representatives (08/91). Expected to be enacted mid–1992.
					– Housing and Settlements Law regulates public housing and settlements	Enacted (02/92)	
6.	Strengthen coordination and consultation in the urban development sector	6.01	Develop effective policy coordination in the urban sector as well as the development of mechanisms to support policy review and decision making (1987 onwards)	Establishment of an Interagency Coordination Team for Urban Development (TKPP and an executive secretariate)	* Ministerial Decree (SK) establishing structure and resources of TK issued	Completed (04/87)	Decree issued Extension date on April 1, 1989
	(a) establish an interagency coordination team and an executive secretariate				* TKPP purposes and membership redefined as a policy making body. IMG established to manage technical implementation of IUIDP projects.	Completed (/90)	
	(b) develop coordination arrangements and ability to support future urban development policy review and recommendations	6.02	Evaluate existing urban infrastructure programs and prepare recommendations for medium–term sector plan and program structure criteria and targets, and institutional arrangements (1987–1988)	Assign working group to guide medium–term planning and programming and assign support teams to respective agencies as needed in policy option formulation and recommendation (by TK)	– Assign standing working groups interalia for planning and programming, program implementation, financial resources and training, and institutional development	Completed (/87)	Assignments made

POLICY ACTION PLAN – HGL

Actions, Keysteps, targets, updated April – June, 1992. Previously amended May 3, 1990

No.	Policy Area/Objectives	Medium – term goals	Action Proposed	Key steps during project period (04/87 – 04/92) (N.B. crucial steps indicated by*)	Description **(target)	Monitoring indicators
				– Draft work program and TORs for respective agency activities and technical assistance	Completed (/87)	Agreed work program
				* Appoint consultants to respective agencies as needed	Completed (12/87)	Contract signed
				* Conduct policy and technical option analyses and formulated alternative screnario proposals and recommendations	Being implemented **(09/90)	Working papers and recommendations to be reviewed by TK
				– Issue guidance memorandum on selected strategy	Being implemented **(/90)	Memorandum issued
				– Issue guidelines and procedures for medium – term planning	Being implemented **(/90)	Guidelines issued
				– Prepare medium – term (5 – year) plan for sector	Being implemented **(/90)	Medium – term plan recommended by TK

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ANNEX C

THE INVESTMENT PLAN

Municipal Finance for Environmental Infrastructure

ANNEX C

THE INVESTMENT PROGRAM

1. Trends in the GOI Urban Investment Program

Table 1 presents data on the core of the GOI urban investment program from 1986/87 through 1991/92 (including investment programmed by central agencies as well as directly through the PJM process--all data are actuals except for 1991/92 figures which are current estimates).[1] The program's total investment increased substantially from Rp. 429 billion in 1986/87 to Rp. 659 billion in 1987/88 and then again to Rp. 794 billion in 1988/89. The increase in these years is largely explained by the major increase in resources made available through the Urban Sector Loan from the World Bank. With the depletion of funding from that source, however, GOI contributions expanded significantly. Clearly, the phasing in of the HG resources also played an important role in allowing the program to sustain the level in the range of from Rp. 728 billion in 1989/90.

Still that level was well below the Rp. 900 billion targeted for that year in Repelita V. And the 1990/91 total was only Rp. 751 billion. On a real per capita basis, the program has declined significantly over the past two years. Both the World Bank and BAPPENAS recognize this problem and judge that institutional constraints may be more responsible than financial constraints for this deterioration in performance in the short term: the pipeline of high quality projects ready for appraisal has declined and there are important bottlenecks in disbursement and implementation.

For the six years shown, 38 percent of the total was spent on water supply and another 27 percent on access roads. Smaller shares went to flood protection, environmental sanitation and drainage, and the Kampung Improvement Program. This allocation of resources generally conforms to the priorities stated in Repelita V.

[1]The data on these tables include O&M expenditures as well as capital investments for the basic needs subsectors covered under IUIDP. Similar data (isolating expenditures directly in urban areas) are not available for other subsectors such as energy, telecommunications, and port and market development.

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Table 1
THE URBAN INVESTMENT PROGRAM, 1986/87-1991/92
(Current Rp. in billions)

	Total	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92
USE OF FUNDS							
Water Supply	1,582.2	188.6	250.6	260.7	198.9	332.1	351.3
Flood Pevention	451.3	28.6	103.7	119.5	105.3	41.5	52.7
Env.San.& Drainage	468.5	42.1	72.0	108.4	88.9	96.0	83.1
Kampung Improvement	263.8	23.4	38.8	59.4	52.0	58.4	51.8
Roads	1,116.0	115.6	146.7	204.3	255.8	188.4	207.2
Planning	248.0	30.2	47.3	41.2	48.8	38.3	44.2
Total	4,149.7	428.5	659.1	793.5	727.7	750.7	790.3
SOURCE OF FUNDS							
National							
Cipta Karya	1,345.4	133.8	215.5	235.8	202.0	239.7	318.6
Other	917.2	53.1	183.7	215.0	206.0	136.7	122.7
Subtotal	2,262.6	186.9	399.2	450.7	408.0	376.4	441.3
Local							
Domest. Loans	221.7	12.1	27.2	64.8	8.5	55.4	53.8
INPRES	447.0	60.5	70.5	72.0	106.8	71.9	65.4
SDO	34.2	4.8	4.2	19.7	2.0	1.2	2.3
APBD I & II	585.6	65.7	75.3	138.8	131.1	85.0	89.8
PDAM	598.6	98.5	82.8	47.6	71.3	160.8	137.7
Subtotal	1,887.2	241.6	259.9	342.8	319.6	374.3	349.0
Total	4,149.7	428.5	659.1	793.5	727.7	750.7	790.3

SOURCE: TKPP

2. HG-001 Investment Program Expenditures

Table 2 shows that under the first three tranches of HG-001 (through 1991/92), the GOI had invested a total of $72.9 million in HG-eligible expenditures. Of this total, $56.2 million went for projects in the regular program being administered by DG Cipta Karya: 45 percent of this amount went for water supply projects, and another 27 percent for Kampung Improvement Program (KIP) projects, while shares of 8 percent or less each were allocated for projects in human waste and sanitation, drainage and flood control, solid waste disposal, access road improvement, and urban planning. The remaining $16.7 million was channeled to the sector via loans through the Regional Development Account (RDA), representing 23 percent of the total (data on the sectoral allocation of RDA outlays are not available).

This sectoral allocation of HG-001 investments differs from that for the overall GOI program shown in Table 1, with much larger shares going to water supply and KIP and much less for roads. These differences do not represent a problem. In fact, it is quite appropriate for HG investments to give much heavier emphasis to the KIP program in which virtually all beneficiaries are poor.

3. MFEI Indicative Targets

Indicative expectations for the MFEI investment program are also shown in Table 2. These reflect an increasing share flowing through the RDA (20 percent). As to the sectoral composition, the targets retain a high share devoted to Kampung Improvement (30 percent) and comparatively low shares for roads (3 percent) and drainage (8 percent), but they change emphasis among the other sectors. Analysis of environmental issues (Annex D.2) suggests that in programming for low income groups, there may have been too much emphasis on public provision household connections for water supply in the past and, in the face of mounting pollution problems in Indonesia's cities, not enough on human and solid waste disposal and treatment. Therefore, compared to the HG-001 distribution, the targets indicate a reduced share for water (30 percent) and expanded shares for human and solid waste programs (15 percent and 10 percent respectively).

This sectoral allocation is meant to be indicative for the full MFEI investment program. In other words, it is expected that the ultimate GOI allocation of rupiah expenditures under the program, equivalent to the full $125 million of HG loan funds, be distributed roughly in conformance to the percentage targets shown in the last column of Table 2.

A:\MFEI.C, ML, November 4, 1992.

Table 2

THE HG INVESTMENT PROGRAM

	HG-001 Tranches 1-3			Indic. Targets, MFEI		
		Percent			Percent	
	US$ Mil.	Of Total	Excl.RDA	US$ Mil.	Of Total	Excl.RDA
REGULAR PROGRAM						
Water Supply	25.5	35.0	45.4	30.0	24.0	30.0
Human Waste	4.0	5.5	7.2	15.0	12.0	15.0
Drainage	4.4	6.0	7.8	8.0	6.4	8.0
Solid Waste	3.0	4.1	5.3	10.0	8.0	10.0
Kampung Improv.	15.3	21.0	27.2	30.0	24.0	30.0
Access Roads	1.6	2.2	2.9	3.0	2.4	3.0
Planning and EIS	2.3	3.2	4.2	4.0	3.2	4.0
Subtotal	56.2	77.1	100.0	100.0	80.0	100.0
RDA	16.7	22.9		25.0	20.0	
Total	72.9	100.0		125.0		

Source: Calculated based on TKPP data.

ANNEX D

TECHNICAL ANALYSES

D.1 Municipal Credit and the RDA
D.2 Environmental Analyses
D.3 Technical Assistance and Training Requirements
D.4 Economic Analyses

Municipal Finance for Environmental Infrastructure

ANNEX D.1

MUNICIPAL CREDIT AND THE RDA

1. INTRODUCTION

2. THE DEVELOPMENT OF A MUNICIPAL CREDIT SYSTEM
   - 2.1 The Case for Greater Use of Municipal Credit
   - 2.2 Constraints on Municipal Lending

3. THE REGIONAL DEVELOPMENT ACCOUNT
   - 3.1 Evolution of the RDA
   - 3.2 Functioning of the RDA

4. THE LONGER TERM ROLE FOR CREDIT
   - 4.1 Development Principles for the RDA
   - 4.2 The Choice of Sectoral Credit Policy

5. A STRATEGY FOR INSTITUTIONAL DEVELOPMENT OF THE RDA

ANNEX D.1

THE ROLE OF MUNICIPAL CREDIT: A STRATEGY FOR STRENGTHENING THE RDA

1. INTRODUCTION

One of the principal policy objectives of the Municipal Finance Project under HG-001 has been strengthening the role of credit in municipal finance, while establishing the Regional Development Account (RDA) as a market-oriented, routinely accessible source of credit for local authority investment.

This annex considers how much progress has been made toward the establishment of a municipal credit system, and how much priority should be assigned to this objective in the MFEI policy program. It then recommends a specific strategy for strengthening the RDA. The strategy involves sequential steps, with later actions occurring only after earlier objectives have been achieved.

Although this annex deals expressly with the municipal credit system and RDA, in both HG-001 and the proposed MFEI, credit is but one element in an overall strategy to help establish a self-sustaining system of local and intergovernmental finance capable of meeting the country's urban investment and urban service needs. The municipal finance strategy is built around four pillars of reform articulated by the GOI in its urban sector policy:

- Strengthening local governments' own-source revenues.
- Rationalizing the intergovernmental grant system, so that local authorities have access to more predictable and transparent central-government transfers.
- Establishing a workable local government credit system, which can serve as a mechanism of transition to local authority borrowing from the private capital market.
- Strengthening the private sector's role as investor in infrastructure facilities and provider of local services.

MFEI, as proposed, will continue to support all of these policy themes. However, the credit system will receive special attention, largely because of the critical design issues that must be faced.

2. THE DEVELOPMENT OF A MUNICIPAL CREDIT SYSTEM

2.1 The Case for Greater Use of Municipal Credit

A municipal credit system is not an end in itself. It deserves donor support only if it furthers the basic development strategy of the government. Therefore, it is appropriate to ask at the outset why the establishment of a market-oriented credit system is important in Indonesia.

From the perspective of the central government budget, credit financing is essential if the government is to meet or approximate its investment targets for the urban sector. Formerly, almost all local capital investment was financed through central government grants or central government direct investment. However, central resources are not sufficient to pay for all investment needs. This is especially true now that revenues from the petroleum sector have subsided, and the government has committed itself to public sector spending restraint. If the government's ambitious investment goals are to be achieved, some of the resources used to finance investment projects must be recovered to finance further rounds of investment. Hence, the need to rely to a greater degree on loan financing.

From a local perspective, the possibility of accessing capital markets through borrowing lessens dependence on central government transfers, offers the opportunity to increase local investment levels and catch up on local capital needs, and can stabilize longer-term investment planning, by reducing the uncertainty attached to capital financing sources.

In the Indonesian context, there are additional reasons for strengthening the municipal credit system, which also suggest the form that such a system should take. As stipulated in Government Regulation No. 14 of 1987, which assigned responsibility to Level II local authorities for the development of urban infrastructure and services, the Government has chosen a policy of decentralization in the urban infrastructure sector. A municipal credit system supports decentralization by making resources available to local authorities to finance investment packages of their own initiative, as long as the local authorities are willing and able to bear the costs of borrowing. This suggests two requisites for an efficient municipal credit system: it should be responsive to local government credit demands (i.e., its lending should be demand driven), and it should lend funds at close to market rates of interest so that local authorities' choice whether or not to invest in infrastructure facilities is made after taking into account the true opportunity cost of capital.

As self-evident as these conclusions may seem to be, most municipal credit institutions in the developing world do not operate in this manner. Instead, the central government often uses credit as a way to force local authorities to share the cost of investments of the central government's choosing. Most municipal credit institutions channel capital to local governments at far below market rates of interest. That is, political factors, rather than market demand, are used to allocate capital. The effective rate of interest is lowered still further by weak and erratic collection practices. The establishment of a credit financing institution that systematically and consistently supports decentralization, by allowing

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municipal demand (i.e., municipal willingness to pay the true cost of capital) to determine loan allocations, is highly unusual.

Indonesia has made striking progress in de-regulating the financial sector and opening it to private market competition. This suggests a further orientation for a system of municipal credit: it should aim to be integrated within the same financial-sector principles. Eventually, municipal lending institutions, whether operated within the public or private sectors, should seek to raise capital on competitive market terms and lend to municipalities at market rates of interest, adjusted for credit risk. This is by no means the only model for a municipal credit system. In fact, in most of the developing world, and in many European countries, municipal credit historically has been supplied by institutions capitalized by government at zero or very low rates of interest, or from capital gathered at below-market interest rates from captive sources of savings. For example, in France the Credit Local de France in the past raised its capital at very low interest rates from small-saver deposits through the postal savings system. Below-market capital financing of this kind was possible as long as small savers had no options for their deposits. However, when the French financial system was deregulated, starting in the 1970s, small savers switched their deposits to alternative institutions paying market rates of interest. As the captive source of capital dried up, the Credit Local de France was forced to raise new capital by issuing bonds at market rates of interest, and has since adopted a policy of on-lending to local governments at market rates in competition with private lenders. Given the financial sector de-regulation that already has occurred in Indonesia, it would be counter-productive at this date to construct a municipal credit system that relied perpetually on privileged access to below-market sources of capital for its lending.

2.2 Constraints on Municipal Lending

Although there is a strong case for greater use of credit as part of the municipal financing system, and for moving toward market rates of interest on municipal loans, there are also practical constraints on both the volume of loans and interest rates.

2.2.1 Municipal Ability to Repay Loans from Local Revenue Sources

It is fundamental to credit financing that loans must be repaid. Unlike grants or other transfers from central government, loans by themselves do not add to the wealth of a local authority. Rather, they provide financial resources at a particular point in time, in return for a stream of future repayment obligations. This concentration of resources makes it possible to finance higher levels of investment, and can be of critical importance to local governments that are seeking to upgrade their infrastructure base, but in economic terms the true payment for the investment occurs over time as the loan is repaid.

The capacity of local authorities to finance investment through credit thus ultimately is constrained by their capacity to generate local revenue. Loan financing is most suitable for projects that themselves generate the revenue needed for loan repayment -- either directly

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through service charges or other sources of project income, or indirectly through the growth they generate in the community's taxable base and consequent tax revenues. Infrastructure loans can, of course, be repaid from general local revenues (including unrestricted transfers from the central government), but in this case they are displacing other elements of the local government budget. It is customary in municipal lending to require local authorities to prepare financial rate of return studies, which demonstrate that the projects to be loan-financed will generate direct or indirect revenues sufficient to cover loan repayment obligations.

How much revenue a project will generate, in turn, depends upon two factors: market demand for the project's services, and the structure of the local government revenue system. Household market demand for water connections, for example, may fully justify an investment in water system expansion, but unless the local tariff system captures this willingness to pay, local authorities may not generate enough revenue to be able to pay back a project loan. Or, public investment in local roads and markets may generate enough private investment to fully justify a project on economic grounds, but unless the local tax system is able to capture some of the economic growth in tax revenues local authorities may not be able to finance loan costs.

In Indonesia, a weak local revenue system currently limits municipalities' revenue options, and constrains their capacity to borrow. Recognition of these limitations has prudently constrained local loan demand. In the future, reform of the local revenue structure will have to go hand in hand with expansion of the municipal credit system, so that greater revenue-raising ability underlies the greater use of credit.

Some important reforms in this direction already have been implemented. For example, local water authorities (PDAMs) are now encouraged, and even required, to charge full cost-recovery tariffs, which allow them to raise the revenue to repay capital loans. Loans to water authorities have, in fact, accounted for the greater majority of local government lending (see below), consistent with local authority ability to pay. Solid waste collection tariffs have been increased in some municipalities, and can be raised in others to finance capital investment and borrowing. Considerable room for improvement exists in collection practices, as well, to increase effective revenue yields.

Local general tax rates in Indonesia, however, are extremely low, making it almost impossible to recover the cost of loans used to finance general improvements or economic development projects. For example, the most important local general revenue source, the property tax, is imposed at an effective rate of 0.1 percent -- a nominal rate of taxation of 0.5 percent imposed on a valuation base that is supposed to equal 20 percent of the market value of property. Under this system, for an economic development project to be financially viable to local government, it would have to generate net private investment 200 times greater than the cost of public investment, in order to pay back a loan at 20 percent interest, the low end of current commercial rates! Such a payoff to public investment is extraordinarily rare.

If municipal credit is going to be used on a significant scale to finance general local investment, it will be critical to increase local taxing authority so that the loans can be repaid. (A doubling of the property tax rate, for example, to a still very modest 0.2 percent effective rate would allow local authorities to finance further expenditure priorities, which might very well include the financing burdens of additional infrastructure investment.)

2.2.2 Ability to Pay Market Rates of Interest

Local governments often insist that they are unable to afford to borrow at market rates of interest, and that therefore municipal loans should be made at highly subsidized interest rates.

Under the current municipal revenue system, and given the poverty of many regions of the country, this inability to pay is rooted in fact. However, the appropriate solution is not to highly subsidize interest rates, which would create fundamental difficulties for ever integrating municipal lending within the commercial credit market, but to pursue the course which Indonesia already has adopted: mixing loans and grants, or loans for local investment with central investment installed locally at no cost to local authorities, in a single investment package.

The central government grant share can be adjusted to take account of important differences in local conditions. The grant share appropriately will be higher for poor regions of the country, for investment packages that target service benefits on the poor who have the least ability to pay, and for investments in environmental infrastructure that have significant externalities (i.e. benefits for others besides the service users who are asked to pay tariff charges). Using up-front grants to pay for the centrally subsidized portion of investment has two important advantages: it makes explicit the magnitude of subsidy rather than obscuring it through below-market interest charges, and it allows the municipal loan system to operate on the market principles that encourage investment efficiency.

3. THE REGIONAL DEVELOPMENT ACCOUNT

3.1 Evolution of the RDA

Under HG-001, USAID supported formal institutionalization of a consolidated loan fund, the Regional Development Account, as the principal vehicle for demand-driven credit.

Previously, the GOI had extended credit to local authorities through a number of special arrangements. Domestic credit was provided, on a relatively modest scale, through several subsidized channels -- most importantly, a special program for providing highly subsidized loans for local market development. In addition, the GOI on-lent donor funds for investment in water supply, wastewater treatment and collection, and other functions through subsidiary loan agreements (SLAs). The SLAs continue to be used for credit financing of local

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authority investment under new World Bank and Asian Development Bank programs. However, a number of existing SLA loans were transferred to the RDA for administration. Formalization of the RDA made it the principal vehicle for municipal lending outside of these international loan programs. (The Regional Development Banks also make some small-scale loans to local authorities.)

Procedures for operating the Regional Development Account were established by decree of the Minister of Finance on Sept. 30, 1991. On January 31, 1992 an operations manual was promulgated. Subsequently, the interest rate for loans made during 1992 was fixed at 11.5 percent. Although this rate is well below the commercial rate for short to intermediate-term loans, currently in the range of 23-25 percent, it establishes a positive real interest rate which reflects the average inflation rate over the past three years (9.5 percent) plus estimated administrative costs (2 percent). Formalization of the RDA fully satisfies the sub-objective of HG-001 of creating a consolidated municipal loan fund, as specified in the Policy Action Plan.

3.2 Functioning of the RDA

In its present structure, the RDA is a funding facility for loans to local authorities, operated as a special account at Bank Indonesia. The account can receive funds for on-lending from the Government of Indonesia, foreign loans or grants, and payment of interest and principal on past borrowings.

Loans can be made to either general-purpose Level I and Level II governments (PEMDAs) or the corresponding regional enterprises (BUMDs). However, loans must be used to finance income-producing activities, and cannot exceed 75 percent of project cost. The RDA account, though not formalized by ministerial decree until 1991, actually has existed since before 1990. In addition, it has been assigned responsibility for administering a number of earlier, outstanding loans which were made under international donors' sub-lending agreements. As of March 31, 1992, loans for water sector development accounted for 82.6 percent of its portfolio. Bus terminals, solid waste projects, and estates were the next largest sectoral users of funds.

New RDA loans can be made for a maximum loan period of 20 years with a maximum grace period of 5 years. In the past, the RDA has not required either principal or interest payments during the grace period. However, the new Operations Manual states that the grace period is to be limited to principal payments (see discussion below, however). Because most of the loans that RDA administers (and all of the loans that it originated) still are in their grace period, there is only limited experience with repayment.

The procedures for loan application are spelled out in the Operations Manual. They require preparation of a Project Feasibility Study, which includes estimates of the economic benefits of the project, technical specification of the work to be undertaken, clarification of

administrative responsibility for the project, and a financial analysis which includes a projected Internal Rate of Return and a monthly financial plan for the use of funds.

Although the RDA has been officially created and an Operations Manual prepared, many of the key issues regarding its form of operation remain to be clarified. This is especially true because, from the date of promulgation of the Operations Manual in January, 1992, no new loans have been made, and no new loan applications that follow the Operations Manual application procedures have been received.

Loan Appraisal. The Operations Manual states that loan applications will be appraised by (a) the Director General of Monetary Affairs of the Ministry of Finance, (b) the Director General of the Budget, and (c) BAPPENAS. How this appraisal process will work in practice has yet to be determined. Officials at RDA report that they believe the principal project appraisal responsibility will rest with the Directorate of Investment Funds (DDI), whose staff has received training in project appraisal from the Harvard Institute for International Development (HIID). However, BAPPENAS has expressed a desire to review projects for their conformance with national or regional investment priorities. The amount and type of review that projects receive, as well as the ease of loan application, will go far to determine whether the RDA can function as a quick-disbursing loan facility and the extent to which it supports principles of decentralization.

Interest Rate. The Operations Manual states that a uniform interest rate will be used for all loans made during a year, and that the interest rate will be announced by the Ministry of Finance in January taking into account the average inflation rate over the past three years and the administrative costs needed to support the RDA loan facility. The rate of 11.5 percent announced for loans made in 1992 represents a positive real rate of interest plus a 2 percent margin for administrative costs. A number of local governments, supported by some officials at BAPPENAS, however have protested application of a uniform interest rate of this magnitude. They argue that the interest rate on loans should be adjusted to reflect local governments' ability to pay. The interest-rate issue has not been fully resolved.

Loan Repayment. A great deal of ambiguity concerning loan repayment runs throughout the RDA Operations Manual and RDA practices. The Operations Manual first specifies that loans must be repaid on schedule, then qualifies this with the statement, "It is understood, however, that during the loan period, either the Borrower or the guarantor may sometimes encounter financial difficulty, so that they may be unable to fulfill their obligations. In such cases, the Borrower can request the Minister of Finance to reschedule loan payments." Similarly, after stating that the grace period applies to principal payments only, the Operations Manual notes that "In cases where the Borrower is unable to pay interest during the grace period, the interest occurring during the grace period will be accumulated with compound interest and will be capitalized." There are statements to the effect that if loan rescheduling occurs, the interest rate will be increased, and penalties will be imposed for late payments. However, no specific schedule of interest-rate adjustments or penalties is

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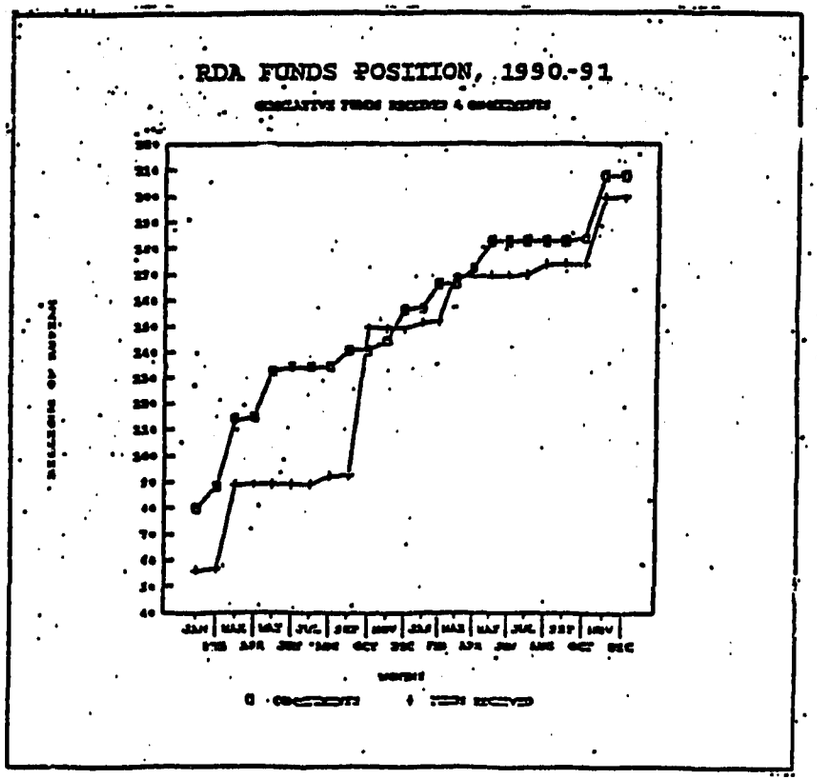
provided. On balance, the Operations Manual conveys the impression that not all borrowers are expected to make all loan payments.

This ambiguity carries over to the actual repayment record on outstanding loans.. According to the RDA's records, the arrearage rate on the loans it administers is 29.0 percent on principal (measured as the ratio of principal payments past due to total principal due to have been paid, excluding local authority payments of monies not owed) and 24.3 percent on interest (additional interest has not been charged on late payments). The records on loan payments are not in good shape. Often, RDA records on principal amounts outstanding differ from local government records. RDA does not systematically notify municipalities of loan payments due in the next year, so that they can be budgeted in advance, and does not routinely notify borrowers as payments come due.

Funding. Although the Operations Manual states that interest and principal payments on past loans can be used to replenish the RDA account, up to now such payments have gone into a general state account. (The evaluation team was given conflicting information as to whether any loan repayments are now being retained in RDA.) BAPPENAS' position has been that since most of the funds initially were provided by external donors, subject to international agreements, interest and principal payments should be repaid to the state for new allocation decisions. No plan has been agreed upon for longer-term capitalization of the RDA, nor has there been a stable policy of government capitalization. As Figure 1 illustrates, RDA funds have moved ahead in fits and starts. Loan commitments have moved in close parallel as funds became available.



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General. This summary should make clear that a number of uncertainties remain as to how the RDA will operate. These uncertainties can be resolved only by observing the RDA in practice. Unfortunately, since the RDA in its present form has made no loans, and has received no loan applications, prospective borrowers can only speculate on its modus operandi.

Despite the uncertainties, does the RDA represent the best base in Indonesia on which to build a municipal credit system? The Presidential Decree defining RDA procedures provides a good institutional base for municipal lending. The interest rate of 11.5% is a positive real rate, which is much higher than the rate at which loans were made in the past. The Operations Manual spells out a reasonable operating system for the RDA, though the applications procedure is more complicated than necessary (including such requirements as month-by-month spending projections and economic as well as financial rate of return projections).

Most fundamentally, there appear to be no viable alternatives on which to build a domestic municipal credit system over the short to intermediate term. Local governments have not established themselves as good credit risks, and therefore cannot expect to systematically borrow on the private market. A history of municipal borrowing and repayment will be a prerequisite of private entry into municipal lending. At present, municipal creditworthiness of this kind is a good way off.

Moreover, in the short to intermediate term there are a number of other impediments to a municipal bond market. First, current laws do not permit the issuance of municipal bonds. In addition, the central government has a longstanding policy of not issuing bonds or otherwise borrowing from domestic financial sources, for fear in incurring imprudent obligations. Until this policy is changed, it is difficult to imagine the central government allowing municipalities to issue bonds. Finally, there are no organizations in Indonesia equipped to assess municipal credit risk for private sector lenders, and no relevant experience, besides the poor payment record on central government loans, on which to base credit assessments.

None of these observations is meant to discourage exploration of the possibility of issuing bonds, especially in the largest cities. In practical terms, however, the most promising path to eventual establishment of a private-sector municipal credit market is to establish municipal creditworthiness through an efficiently operating RDA, which gradually moves toward market terms of lending. In other countries (like Colombia and Zimbabwe), it has proved possible to "graduate" larger cities with good repayment records under a publicly-operated municipal credit system to the private market.

A second alternative to the RDA that has been discussed in Indonesia is use of the Provincial Development Banks as municipal lenders. These are public-sector banks, partially owned by the municipalities, which makes them more predisposed to municipal lending. The Provincial Development Banks, however, are politically oriented institutions. Although it

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was not possible to examine in detail loan repayment rates for the Provincial Development Banks, it is well known that they have been saddled with repayment problems, which would in all likelihood be more severe in the case of loans to municipal governments. The Ministry of Home Affairs which supervises the Provincial Development Banks has indicated that it would favor a more highly subsidized interest rate than is now available through the RDA.

There is no reason to oppose development of the Provincial Development Banks as municipal lenders, if they adhere to the lending principles outlined below. Indeed, a market-oriented lending system could spread faster if pursued simultaneously by the RDA, the Provincial Development Banks and private lenders. At this point, however, a good deal of institutional development has gone into the RDA, which it would be unwise to abandon. It would be a substantial reversal to the principle of market-based municipal lending if the Provincial Development Banks were to enter the field with highly subsidized interest rates that undercut the RDA. Moreover, subsidized lending would jeopardize the financial status of the Provincial Development Banks, which (unless they received direct central government funding for the purpose) would have to tap their precarious financial reserves to pay for the interest-rate subsidy.

In summary, priority should be given to strengthening the RDA, but within the context of a multi-year plan for the institution which will allow it to help municipalities establish eventual access to the private credit market.

4. THE LONGER TERM ROLE FOR CREDIT

4.1 Development Principles for the RDA

Establishment of the RDA just begins the job of building a long term role for credit in the urban sector. Credit presently finances only a small proportion of urban sector investment--estimated at about 15-20 percent in recent years. The greater part of this lending has been done through sub-loan agreements under international donor programs, outside of the RDA.

BAPPENAS' *Progress and Issues* report points out that a longer term approach to credit is needed, which will assure that local government lending is integrated with the rest of Indonesia's market-based financial system. Only the mobilization of voluntary domestic savings for investment in infrastructure can assure, over the long run, that urban investment needs will be met. As *Progress and Issues* notes, the true importance of the RDA is as a transition institution that can help municipalities eventually tap into private sector savings, via the private credit market.

If the RDA is to serve as an efficient transition vehicle to private credit markets, it needs to build on several key principles:

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* *There must be adequate and stable capitalization of the RDA.* Over the past two years RDA has made new loan commitments averaging about Rp.60 billion per year, and has accounted for some 7 percent of investment in the Cipta Karya urban subsectors. For the last five months, however, the RDA has not made new loan commitments, primarily because it has no funds to lend. It has actively discouraged loan applications until it receives further capitalization.

The $20 million in additional HG funding targeted to the RDA as the final tranche of HG-001 will be helpful in reactivating the RDA's lending program, but it will not solve the principal capitalization problem. To achieve its broader goals, the RDA needs regular capitalization from domestic sources and, as originally contemplated, needs to become the standard vehicle for on-lending at least a part of all donor funds for the urban sector.

There are various alternatives for strengthening domestic capitalization of the RDA. One route is to have a regular budget allocation over the next several years, until the RDA builds up a large enough portfolio to capitalize itself primarily through loan repayments. Another route is to transfer to RDA administration the outstanding SLAs from past donor funding. Payments on these outstanding loans, if retained by the RDA, would give it a stable capitalization from which to make new loans for several years, making the RDA a true revolving fund. From RDA's perspective, this alternative has the advantage of making capitalization more automatic and less dependent on annual budget decisions. However, this approach has the disadvantage of giving the RDA "automatic" capitalization from government funds at zero cost, without having new injections of capital tied to RDA performance.

* *Loan applications should be encouraged.* The RDA currently is managed so as to discourage loan applications in excess of financing capacity. If the RDA is to become an instrument for expanding the use of credit, "excess" applications should be encouraged. Completed loan applications are the best measure of the demand for credit. The HIID advisors to the Ministry of Finance have estimated that potential demand for RDA loans is in the vicinity of Rp.600 billion, based on their survey of local governments and local public enterprises. However, demand estimates are inevitably uncertain until they are translated into loan applications, particularly in view of some municipalities' resistance to the RDA interest rate. A backlog of loan applications for good projects is the best possible indication that the scale of credit operations should be expanded, and is the best guarantee that any new program of credit support can be quickly disbursed for worthwhile purposes.

* *RDA's appraisal practices should be clarified as soon as possible.* The ambiguity surrounding RDA's loan appraisal process needs to be removed before the RDA can be considered a transparent or stable source of loan funding. This is a further reason for accelerating consideration of one or more pilot loans through the RDA, so that the appraisal process can be tested in practice, and any difficulties in the new procedures can be pinpointed and worked out before the new HG financing is received.

* *Loan repayment must be taken seriously.* If the RDA is to facilitate transition to private credit market financing, it is imperative that it establish a rigorous record of timely debt repayment. The principal reason that government-operated municipal credit institutions in most other countries have failed, frequently becoming barriers to private lending rather than facilitators of it, is that they do not require prompt and universal repayment of loans. Once municipalities become accustomed to making late payments, skipping payments, or appealing to central government for re-negotiation of loan terms, lending to them acquires a political risk that is virtually impossible to overcome. Perhaps the most important steps that the RDA can take in preparing for private-market lending to municipalities are to appraise loan applications rigorously so as to ensure that projects have the capacity for repayment, then demand that local authorities make all debt payments as due. One step in this direction is to make it crystal clear that the RDA under no conditions will accept loan applications from enterprises that are not current in all of their past payment obligations. Such a statement could be introduced prominently into a new version of the Manual of Operations. Another step is to introduce automatic covenants into loan agreements, which require that borrowing enterprises maintain a minimum margin of net-revenues-before-debt-servicing over repayment obligations (say, 30 percent) and that service prices be raised so as to restore the margin whenever it falls below the required level. Such covenants are a frequent feature of revenue bonds in developed countries, and have been included in modified form in the World Bank's East Java-Bali project.

* *The RDA should develop a long-term plan for identifying and reducing local government credit risk.* As a transition institution, part of the RDA's role is to identify (through its lending experience) the credit risks involved in municipal loans and gradually reduce these so that it becomes feasible for the private sector to lend to local authorities. Each of the RDA's lending practices should be re-examined in this light: will it help identify and reduce municipal credit risk? For example, the practice of providing a 5-year grace period, during which neither principal nor interest payments are required, has been found in other countries to obscure the costs of debt-servicing and encourage local authorities to borrow beyond their capacity. An analysis of the RDA's loan repayment experience could examine the record of initial payments after expiration of the grace period, as these begin to come due, to determine whether similar risks are being created through RDA loans. Perhaps of greater urgency, the RDA should have a systematic program of advising local authorities in advance when initial loan payments will come due, and ensuring that local authorities budget for these payments.

Experience in other countries also provides lessons about techniques that have succeeded in reducing municipal credit risk. For example, liens on central government transfers have proved to be extremely effective in reducing municipal default rates. These arrangements automatically give lenders first claim on central government transfer payments in the event a municipality does not make loan repayments on time. In Indonesia, the most suitable device probably would be a lien on central government PBB transfers. In the event of loan arrears, the RDA or a private lender would have prior legal claim on municipality's PBB payments from the central government. Liens on central government transfers are used as loan

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security in such diverse countries as Colombia, Morocco, and the state of Rio Grande do Sul, Brazil, where they have essentially eliminated credit risk for the lender, and in many states of the United States where lenders to high-risk central city school systems can have their loans protected by prior claim on school aid payments by the state. In the United States, several distressed central city school systems, which were formerly shut out of the credit market completely, have attained AA or AAA credit ratings once loans were guaranteed by liens on state government transfers. The use of PBB revenues as a lien would have the further advantage in Indonesia of automatically establishing a maximum prudent level of indebtedness, since lenders would not be protected in cases where annual debt payment obligations exceeded annual property tax entitlements.

* *The RDA should conduct its operations in an environment of full disclosure and transparency.* It is very difficult to obtain information on the terms of outstanding RDA loans, the extent to which loan terms have been renegotiated, the extent of arrears/defaults in RDA's loan portfolio, or collection procedures. If the RDA is to smoothe the way for private sector lending, it is critical that the true extent of credit risk be identified. The terms of all loans should be a matter of public record, as should borrowers' repayment histories. Information of this kind is necessary to permit assessments of credit risk, and to monitor improvements in risk reduction. Uncertainty about credit risk has been found in other countries to be the principal deterrent to private-sector lending to municipalities. Publicly disseminated information on payment histories also would be a sign that the RDA takes repayment seriously; it may in itself discourage payment delays by local governments.

* *A consistent interest-rate policy needs to be articulated.* As noted above, until the RDA actually makes a number of loans, there will remain some uncertainty as to whether its announced new policy of lending to all borrowers during 1992 at 11.5% interest actually will be implemented. Future interest-rate policy is even less certain. There is no mention in the decree establishing the RDA, or in the Operations Manual, of gradually moving RDA interest rates toward market rates. Without such a policy, of course, unsubsidized entry of private lenders into municipal credit markets will be impossible. There will be no demand for private lending, as long as municipal authorities can borrow from a public credit institution at lower rates.

Movement toward market rates of interest for municipal loans does not imply an end to central-government subsidy of urban infrastructure investment. Under the Indonesian municipal finance framework, it is impossible for more than a handful of investments nation-wide to be financed entirely by credit, given the limitations on local taxes and charges. Market-rate loans therefore will need to be blended explicitly with grants in a single financing package, applying agreed-upon criteria to determine the appropriate share of grant financing in the mix.

* *Any protections against municipal credit risk should be equally available to private and public lenders.* It is likely to be many years before a private commercial lender seeks to make a municipal loan. Nonetheless, the same conditions available to a public lender,

such as grant-financing of part of the investment package or liens on central-government transfer payments, should be available to private lenders. One of the paradoxes of municipal credit operations in other countries has been that protection against credit risk has been available only to the public credit institution, not to private banks or other commercial lenders.

* *Commercial banks could be integrated into the municipal lending system, first by serving as collection points for loan repayments and eventually initiating municipal loans that are repurchased by the RDA.* Commercial banks are now used as the collection point for PBB payments and, in many localities, as the collection point for payment of PDAM water bills. If the long-run goal is to introduce commercial banks to municipal lending, it would seem logical to have them collect municipal loan payments, as well. This would expose both municipal officials and commercial bank officers to current lending practices, and perhaps hasten experimentation with strictly commercial loans. It also is likely to improve the payment record, as has happened with property tax and water payments when commercial banks become the payment point.

For water bills and property tax bills the banks are "passive" collectors; that is, they receive payment but do not send out bills or pursue delinquent accounts. In the case of RDA loans, the commercial banks appropriately could be used as active collection agents, who are paid a fee for loan collection. This would help put RDA loans on a more commercial basis.

In the intermediate term, if the objective is to integrate the RDA with the private credit market, commercial banks could be used to initiate municipal loans on terms acceptable to the RDA. The RDA would gradually become a secondary purchaser of municipal loans made by banks, rather than a direct lender. This strategy probably holds the greatest promise for practical entry of the private sector into municipal lending. At the outset, RDA could re-purchase from banks loans made at its standard, below-market terms. Over time, however, it could re-discount loans at rates closer and closer to market rates.

* *RDA should operate as a credit institution that exists to serve local governments.* The essence of a decentralized credit system is that it is demand driven. The RDA's priority should be to finance locally defined investment projects, as long as the RDA can assure itself that the local borrower is able to repay its loan. There is no need for close examination by DDI staff of the details of project spending, and no need for elaborate loan applications. RDA's goal should be to appraise loan applications as swiftly and simply as possible.

* *Local government revenue-generating capacity needs to be greatly enhanced if RDA is to substantially increase the scale of its lending.* As emphasized earlier, the ultimate constraint on municipal lending in Indonesia is local government's limited ability to raise revenue to repay the loans. Until the local sector has substantially greater flexibility to raise local revenue, municipal officials will be prudently reluctant to borrow large sums and are likely to continue to lobby to renegotiate past loans on the ground that they cannot generate the income necessary for repayment.

The only long-term solution to this problem is for central authorities to give local governments greater revenue-generating capacity. This also is critical to the entire program of decentralization of infrastructure responsibility. In the meantime, however, two other steps can be taken. Technical assistance teams can work with local authorities to identify the revenue-generating opportunities that local governments have under current law. These opportunities typically include more aggressive cost recovery pricing for public services, better collection of revenue amounts billed, and updating tax and tariff records to ensure more comprehensive coverage in billing.

Second, the RDA can give greater importance in loan appraisal to local capacity to repay debt. Whereas the current loan application procedure requires a great deal of tangential information not central to loan repayment (and RDA has under consideration an even more elaborate loan application process), repayment capacity is inadequately analyzed. In particular, as municipalities begin to borrow from many different sources under SLA arrangements, typically with extended initial grace periods, it becomes critical to weigh year-by-year repayment obligations over time from all sources of credit against uncommitted sources of local revenue. Local governments can be given training in debt management and financial controls. But lenders also have a special obligation not to encourage borrowing beyond municipalities' ability to pay -- whether the borrowing occurs under international donor SLAs or the RDA.

4.2 The Choice of Sectoral Credit Policy

Using a publicly sponsored municipal credit institution (MCI) to open the way to private-sector municipal lending is not easy. Most attempts around the world have failed. Typically, the MCI becomes a dead-end institution which makes loans at below-market interest rates, re-negotiates loans or fails to collect loan payments whenever municipalities face fiscal pressure, and becomes dependent for its survival on capturing low-cost or "free" capital from government or external donors. This approach permanently separates municipal credit markets from the private capital market, giving local authorities access only to government-provided funds rather than voluntary private savings.

Segmentation of the municipal credit market in this way would be an especially severe loss for local governments in Indonesia. The nation has made, and continues to make, such strong progress in financial market reforms that local governments in the long run can only benefit from integration with the private capital market. As *Progress and Issues* points out, voluntary private savings are the most reliable long-run source of financing for the cities' capital investment needs. The short-run appeal of subsidized interest rates and a flexible loan repayment policy is undeniable. Over the longer term, however, as the GOI urban sector policy emphasizes, local authorities will benefit more from a policy that uses central government grants to deliver subsidies and allows the municipal credit market to operate on private market principles.

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5. A STRATEGY FOR INSTITUTIONAL DEVELOPMENT OF THE RDA

RDA is the most promising base on which to build a market-oriented, demand-driven municipal credit system. However, RDA is at a critical crossroads. If it is to become an effective vehicle for orienting municipal lending in support of decentralization and market principles, it must improve its operations systems and generate support for its role from local authorities as well as other agencies of the central government. The most effective way to do this is by beginning to make loans under its new policies, while launching an assessment of how it can upgrade its operations.

The paragraphs below recommend a five-step strategy for the RDA's institutional development. The reasoning behind the recommendations has been largely laid out in the foregoing analysis; hence, the explanations for the separate steps in the strategy are brief.

1. Conduct an external analysis of RDA's operations and local authorities' perceptions of how operations can be improved.

Ironically, in view of the size of USAID's financial support of RDA, it has never received an external evaluation of its performance. It is critical that one now be conducted. The low degree of disclosure about RDA operations makes it impossible to fully judge the organization's capabilities from publicly available information. Moreover, a number of conflicting perceptions exist, which are impossible to resolve without independent evaluation. Local authorities' perceptions of the ease or difficulty of dealing with RDA, for example, can best be determined by direct interviewing of local government officials. Similarly, a number of alternative explanations have been advanced for the high arrearage rate on the loans RDA now manages; an analysis of how delinquency rates differ by loan characteristics is necessary to discriminate accurately between these explanations.

Future channeling of ADB or World Bank subsidiary loan agreements through the RDA, following RDA loan procedures, will require that these donors appraise the RDA as a development finance institution. The external analysis should anticipate the types of issues likely to be raised in such an appraisal, and assess RDA operations in light of them.

Besides compiling information on the strengths and weaknesses of RDA's current operations, the assessment should make recommendations on the form of institutional development that will best meet the needs of a credit system that supports decentralization and can serve as a bridge to eventual access to the private credit market.

2. Prepare a five year plan for RDA's institutional development that has the support of the Ministry of Finance, BAPPENAS and local governments.

Explicit agreement on a development strategy for RDA is necessary before decisions can be made about how RDA should operate with respect to specific issues. Perhaps the most fundamental question is whether the RDA is intended to be a transition vehicle leading to

eventual integration of municipal credit supply within the private credit market, or is intended to be a permanent parastatal, supplying government-provided capital at below-market interest rates. Other important questions concern how responsiveness to local credit demands can best be built into the RDA structure.

The five-year plan would take into account the findings of the initial analysis of RDA capacity.

3. Provide technical assistance to RDA in the areas highlighted by the institutional assessment as priority needs.

It is difficult to anticipate the findings of the institutional assessment. However, technical assistance may be appropriate over a range of areas, including RDA assessment of local capacity to repay debt, RDA recordkeeping and disclosure, management of RDA's loan portfolio and collection of loan payments that are due, and collaboration with local governments to facilitate loan applications and project preparation.

4. Provide technical assistance to local borrowers and potential borrowers on debt management, project preparation, and use of the credit market.

In a decentralized credit system, the principal burdens of project preparation, loan applications, and financial management of debt obligations fall upon local governments. Targeted technical assistance should be provided in these areas to potential municipal borrowers.

5. Implement the policy changes within RDA that are necessary to fulfill its institutional development objectives.

Earlier sections of this annex recommended policy actions based upon the presumption that the RDA should serve as a transition vehicle paving the way for municipal participation in private credit markets. This list of actions is appropriate so long as the model of RDA as a transition institution is accepted. Agreement on an alternative model for RDA's development would require an alternative set of policy actions. To achieve the basic purposes of supporting decentralization and providing incentives for efficient local investment, however, basic market principles should be built into RDA's lending policy, whatever specific form its institutional development takes.

ANNEX D.2

URBAN ENVIRONMENTAL QUALITY MANAGEMENT AND INTEGRATED INVESTMENT PROGRAMMING

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ANNEX D.2

URBAN ENVIRONMENTAL QUALITY MANAGEMENT AND INTEGRATED INVESTMENT PLANNING

1. INTRODUCTION AND SUMMARY

1.1 Introduction

In March 1992, BAPPENAS submitted the *Issues and Priorities* Report to A.I.D., assessing performance under the HG-001 Policy Action Plan and indicating new priorities for action in the next phases of its decentralized urban development program. Perhaps the dominant new priority identified was urban environmental quality management. This Annex reviews prospects for recognizing this issue as a major theme in the Policy Action Plan for the MFEI Project.

The remainder of this section summarizes main findings and recommendations. Section 2 reviews available data on environmental conditions and trends in Indonesia's urban areas. Section 3 describes the nature and capacity of Indonesian institutions set up to date to deal with urban environmental issues. Section 4 recommends an approach by which the GOI might forcefully address urban environmental degradation.

1.2 Summary of Findings and Recommendations

1.2.1 Urban Environmental Trends

Research over the past few years suggests that environmental degradation is becoming Indonesia's most serious urban problem. Although it has not yet reached critical levels in most cities, air pollution is increasing rapidly, particularly with the enormous recent growth of motorized vehicles. Yet more serious now is water pollution which is accelerating with urbanization as more and more untreated wastes are discharged into rivers and streams and also contaminate ground water resources. Water-borne diseases are already one of the leading causes of serious illness and death in Indonesia's cities. Also, unguided urban expansion into environmentally sensitive areas (particularly lands subject to flooding and watersheds) is growing and can be both life-threatening to the residents and permanently damaging to ecosystems.

A recent A.I.D.-sponsored study of environmental conditions in Jakarta and Ujung Pandang

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found that: (1) the problems are indeed severe; (2) individuals and firms have little understanding of how their own behavior impacts these problems or what might be done about them; (3) a large share of all urban environmental issues are really problems of inadequate development and management of land and infrastructure; and (4) responsibility for dealing with environmental degradation overall remains fragmented. Furthermore, it is generally conceded that the burdens of urban environmental degradation fall most heavily on the poor.

In Indonesia today, there seems to be widespread awareness that urban environmental degradation is already severe. The A.I.D.-sponsored study indicated that households, commerce and industry now believe environmental improvement is important and that many households (roughly 50 percent) are willing to pay for some basic improvements (better public toilets, for instance, or cleaner and better-designed waste water ditches). Government leaders interviewed for the study unfailingly showed concern for the urban environment and an interest in policies and programs to improve it.

1.2.2 Past Efforts to Address Urban Environmental Degradation

Indonesia is ahead of many other countries in attempting to address its environmental problems. Major studies have been conducted, and strategies formulated, in such areas as industrial pollution and forest management. In 1986, the GOI established a process requiring the preparation of environmental impact assessments of government and major private sector projects (AMDAL) and a Presidential Decree in June 1990 formally established the Environmental Impact Management Agency (BAPEDAL), providing a general mandate for pollution control and oversight of the AMDAL process.

However, these steps alone are not likely to be forceful enough to address environmental degradation in Indonesia's rapidly growing cities. Much emphasis of late has been placed on strengthening AMDAL, and studies indicate the much needs to be done to improve it. But environmental specialists are increasingly recognizing that, while they are a necessary part of the process, environmental impact assessments are not enough, often coming too late to affect the key public decisions that determine environmental quality.

A comprehensive approach to urban environmental quality management is being taken in Jakarta where the GOI and local officials (in conjunction with the World Bank supported Metropolitan Environmental Improvement Project) are working to sort out institutional responsibilities and deal with issues such as joint wastewater treatment, institutional strengthening, environmental improvement in kampungs (with a new emphasis on community participation), and informal-sector community-based composting and recycling enterprises. But similar activities are not underway elsewhere. The GOI has not yet developed a complete policy, let alone the institutional capacity, to deal with urban environmental quality management (UEQM) nationwide.

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1.2.3 Suggested Approach: Local UEQM Strategies Linked to IUIDP

The most basic understanding behind the GOI's Policy Action Plan is that local leaders have stronger knowledge and incentives to guide urban development effectively than central officials. The same is true of UEQM. It is also self evident that the solution to most urban environmental problems will depend on improved infrastructure and services, or programs closely linked to them. It follows that the decentralized urban development program defined in the Policy Action Plan is probably the most effective vehicle for addressing urban environmental degradation.

One of the highest priorities for IUIDP now is to move local officials into a more commanding role in ongoing PJM/RIAP preparation and implementation. In the first rounds of IUIDP, many local officials worked closely with the consultant teams and controlled key decisions but this was not true in many others. Another problem is that the PJMs generally have suffered from a lack of analysis and strategic planning and priority setting across sectors before project lists have been compiled. Program staff admit that IUIDP guidelines have been weak in these areas. It is possible to address both of these objectives by a new (but fairly low cost) program to involve local leaders in strategy planning to improve the efficiency and effectiveness of their action programs and, at the same time, give full recognition to environmental problems and opportunities.

2. URBAN ENVIRONMENTAL CONDITIONS AND TRENDS

2.1 Introduction

Rapid urban population growth stresses the environment for two reasons. First, because these "residuals" of human activity in cities are so spatially concentrated, they are potentially more dangerous to human health than if spread more evenly over the national territory. Second, institutions, technologies, and infrastructure systems available to control these problems are often weak. Indonesia's environmental institutions and processes are still embryonic while the acceleration in the rate of urban population growth threatens to overwhelm government's ability to respond. Nevertheless, environmental degradation is not an inevitable consequence of urbanization, but a frequent consequence of poor urban finance and management.

Indonesia does not yet have a system to regularly and reliably monitor changing environmental conditions in its cities. Nonetheless, a number of studies have been completed of late that permit at least a general understanding of problems and trends. Taken together, these studies indicate that urban environmental conditions and infrastructure are lagging behind economic growth and may become Indonesia's most serious urban problem.

This section summarizes the readily available evidence. The first part review measures of urban environmental degradation. The second examines problems in public infrastructure

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and service programs that directly affect environmental problems in cities.

2.2 Environmental Conditions in Indonesia's Cities

2.2.1 Water Supply and Quality

Surface water represents the great bulk of water resources and is plentiful because of heavy rainfall. However, only 25 to 35 percent of the total is a steady flow and, hence, dependably available (KLH, 1991). In 1979, this steady flow provided 4,000 cubic meters per capita per year on average. By 1987, this amount had dropped to 3,270 cubic meters. Projections are that this level will drop to 1,987 cubic meters by the year 2000.

In contrast, demand is expected to rise substantially in many areas. Between 1980 and 2000, demand for water is projected to increase, for example, by 57.5 percent for irrigation and 70.1 percent for industrial use (BAPEDAL, undated). The total water demand for Java, it is estimated, will quadruple. Many cities are drawing the maximum from nearby rivers now and require great capital investments to bring water at high cost from long distances to meet this demand.

In contrast to surface water, groundwater represents a small part of Indonesia's water resources. The depth of groundwater from the surface varies from less than two meters to over 30 meters (KLH, 1991). Groundwater levels typically fall in the dry months of the year. However, the overall level of groundwater -- which supplies the drinking water to up to 62 percent of the urban population, and particularly to the poor -- is sinking in some urban areas, largely because of heavy extraction from industry and urban expansion. The lack of wastewater treatment in urban areas and salt-water intrusion appear to be rapidly decreasing groundwater quality, although no regular measurement program monitors it. Salt water infiltration is occurring in Medan, Cilegon, Jakarta, Semarang, Denpasar, and the northern coast of West and East Java. The most critical problem is in Jakarta.[1]

Groundwater represents a scarce and valuable water resource, particularly as it provides drinking water for most of the urban poor. However, lack of regulation, lack of municipal water provision capacity, and groundwater's low price (usually free) have joined to deplete it and cause its contamination.

While a raw-water supply crisis looms, water quality has also decreased, sometimes dramatically. PROKASIH -- which has initiated the first regular water-quality monitoring in Indonesia -- has measured substantial decreases in water-quality in the rivers running through urban areas in Java (Citarum, Ciliwung, and Surabaya River). Biological Oxygen Demand (a widely used measure of water pollution) in Banjir Kanal -- which provides water for

[1]At present, 2,500 drilled (deep) wells in Jakarta pump 3.1 cubic meters per second. Shallow wells--mainly from households--pump an additional 2.36 meters per second.

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Jakarta -- is fast increasing (Jardine, undated). The amount of heavy metal (except iron) has also risen in Banjir Kanal at the drinking water intake supplying Jakarta.

Infant mortality is an important indicator of health related to provision of safe water. Infant mortality declined from 137 per 1,000 live births in 1971 to 90 in 1985 (KLH, 1991). This drop coincided with heavy increases in investment and coverage under Repelitas I-III for the water sub-sector. Piped water coverage quadrupled in this period. However, further progress seems stalled. Ministry of Public Works (MPW) data indicate that safe water coverage -- including safe piped and groundwater sources -- remains at around 38 percent throughout the country as a whole. (BAPPENAS quotes 65 percent as a comparable figure for urban areas.) Given spending and population projections, the proportion of the national population served by safe water is unlikely to rise much above 40 percent in the next five years. Analysis of this problem (World Bank, 1991a) indicates that institutional capacity -- the ability to develop suitable projects for the water-supply funding pipeline -- may as much of a bottleneck as funding constraints.

Since 80 percent of infant deaths are still caused by water-related disease in Indonesia (KLH, 1991), stalled progress in safe water threatens to have serious health impacts.

2.2.2 Waste Water and Sanitation

Worldwide, government investment programs often focus more on water supply than sanitation or sewage treatment (Kingsley and Ferguson, 1992). Water supply is more visible, a more immediately felt need and earns political capital. The high cost of conventional sewage treatment -- which has made extension a gradual process even in Western European countries -- also contributes to low coverage.[2]

Indonesia has an extremely undeveloped sanitation and sewage treatment sector. Sewer systems reach much less than 5 percent of the urban population, and only a fraction of this sewage gets treatment. The great bulk of the urban population -- 68 percent in Jakarta (MEIP, 1991) -- use septic tanks. However, less than 10 percent of the sludge from these septic tanks gets treatment. In sum, most human waste gets dumped untreated. Jakarta households dump 147 tons of human waste into rivers each day (KLH, 1991). Household waste causes an average of 75-85 percent of BOD in Indonesian rivers (KLH, 1991). It also contaminates groundwater, the principal source of drinking water of urban households, particularly the poor.[3]

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[2] In 1980, Austria, Norway, Portugal, Belgium, and Japan treated less than 50 percent of their sewage.

[3] In Manila, diarrhea in shanty towns is twice as common as in the rest of the city. The infant mortality rate in the old city of Kabul, Afghanistan is 1.5 times that for the rest of the city. Studies of Delhi and Calcutta show higher rates of many diseases in slums areas, and longer duration per illness. See Shin, et al, 1992, pp. 100-105.

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2.2.3 Solid Waste Disposal

Solid waste collection is poor and shows few signs of keeping pace with population growth. Only 60 to 80 percent of Jakarta's garbage gets collected and transported out of the city. The share is substantially lower for many smaller cities. The uncollected garbage gets dumped into waterways, causes water pollution and drains to block. Even when dumped at sites, solid waste creates problems, including odors, smoke from fires, leaching of chemicals into surface and groundwaters, and breeding of rates, flies, and mosquitos, Incinerators create air pollution and ash disposal problems.

2.2.4 Air Pollution

Motor vehicles account for a substantial part of a wide variety of air pollutants in most urban areas.[4] The rapid growth of motorized vehicles in Indonesia -- projected at over 10 percent per year (Midgley, 1991) and, thus, more than doubling in a decade -- bodes ill for future air quality.

Various studies indicate that Jakarta already has a serious problem with suspended particulate matter. This air pollutant causes the widest impact on human health by provoking respiratory illness. As of 1980-84, Jakarta had the eighth highest levels of suspended particulate matter of 40 cities selected for analysis by the World Health Organization (1987). Subsequent studies bear out this picture. A more recent study by the Population Crisis Committee (1988) gave Jakarta the worst ranking in air quality -- along with seven other cities -- of the world's 100 largest cities based on either suspended particulate matter or sulfur dioxide concentrations for these cities.[5]

Decentralized and inefficient land use plays a key role in increasing vehicular emissions (Kingsley and Ferguson, 1992). Typically, land development occurs at the urban edge. The distance of residential locations from the city center or other sub-centers increases, and expands demand for motorized travel. Private vehicles replace traditional public modes of travel, such as walking, bicycle, water travel, and, even, public transit. Traffic speeds slow and commute times lengthen.

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[4] 75-90 percent of carbon dioxide emissions, 55-95 percent of carbon monoxide emissions, 30-70 percent of nitrogen oxide emissions, 90 percent of lead in urban air, up to 60 percent of particulate matter, and considerable ozone (Faiz, 1990). Motor vehicles also pollute water and food.

[5] One on a scale of 10, with 10 as the best and one as the worst (Population Crisis Committee, 1989). Other measurements also indicate that Jakarta has high levels of particulate matter. McCullough et al, 1990, note that the recorded levels for Jakarta is 250 ug/m3 versus 200 for Bangkok, 150 for Kuala Lumpur, and a World Health Organization guideline of 60 to 90 ug/m3. Since these two sets of data were collected in the late 1980s, it should be noted that the city has reduced the number of two-stroke vehicles--such as motorized becaks--that are some of the worst polluters and emitters of particulate.

Indoor air pollution from burning biomass (wood, dried dung, agricultural wastes) is poorly researched in Indonesia and has received little attention. Yet indoor pollution typically harms the health of poor urban residents much more than ambient air pollution (World Resources Institute, 1990). Some data indicate that indoor pollution may be particularly severe in Indonesia. Twenty-one percent of households do not have windows (KLH, 1991). In addition, many households purposely keep smoke-producing fires going indoors in order to deter mosquitoes. Poor indoor air quality tends to damage the health of women and children most. As incomes rise, people use less biomass and more modern fuels such as LPG and electricity, reducing indoor air pollution. Indonesia's indoor pollution should decrease with economic growth that allows shifting to cleaner fuels and provides better housing.

2.2.5 Industrial Pollution and Toxic Waste

Indonesian industry is projected to grow rapidly -- at over 10 percent per year during the 1990s. The great bulk of industrial establishments are small, often with outdated, highly polluting technologies (98 percent of Jakarta's 4,000 industrial establishments are classified as small). Even large industries, however, have lagged in adopting modern processes and, with them, modern pollution control.

Industries affect the environment both from their use of inputs and their discharges. Regarding inputs, industry has a particularly damaging role in depleting groundwater -- the main source of water for the urban poor. In Bandung, the industrial sector is mainly responsible for drawing 4,000 liters per second in groundwater, more than twice as much as the entire city water system provides to its customers.

Fifty percent of the pollution burden in some major river basin areas in Java comes from industry (BAPEDAL, Undated). Most large industries have failed to meet the initial standards of waste quality proposed by Indonesia's pollution control agency, BAPEDAL, and the Ministry of the Environment and Population (KLH). In 1988-89, 61 percent of industries in West Java failed to meet waste quality standards (KLH, 1991). A similar study of 100 industries in the Citarum, Cisadane, Ciliwung, and Cileungsi river basins found that 70 to 80 percent fell short of these standards.

The Clean Rivers program of BAPEDAL and KLH have made some progress in reducing surface water pollution loads from the largest polluting industries. However, much remains to be done and small industries -- which discharge the bulk of total industrial pollution -- have yet to be addressed.

2.3 Performance in Infrastructure Provision and Land Management

The following paragraphs focus on the performance of government in providing urban environmental infrastructure. They also examine a key cross-cutting issue that affects these urban environmental sub-sectors: land-use regulation.

2.3.1 Water Supply

The GOI has emphasized the extension of piped water to its urban population. Water represents 38 percent of the Urban Investment Program from 1986/87 to 1991/92. Roughly 5 percent of total government resources have gone into the water sector.

During the 1980s, GOI sought to decentralize water provision through the creation of self-sustaining local water companies linked with local government (PDAMs). Both GOI and donors have focussed considerable attention on the financial viability of PDAMs and their ability to operate as commercial entities by government and donors. Despite the emphasis on financial viability, PDAMs still often structure their tariffs to achieve social policy objectives of income distribution, loosely based on the principle of cross-subsidizing from the rich to the poor. Currently about 151 PDAMs operate throughout Indonesia and approximately 140 BPAMs -- centrally controlled water agencies which are to be converted into PDAMs by 1993 (USAID, 1991).

The results have been impressive. Piped water supply quadrupled under Repelitas I-III (USAID, 1991). But, despite these efforts, public piped water supply suffers from many problems. Most fundamental, piped water coverage is no longer gaining much on urban population growth.

Under Repelita V, 43 percent of expenditures in the urban services sector were to be allocated for water supply in order to extend service to 13 million people (almost twice the 7 million reached in Repelita IV), thereby increasing service coverage from 32 percent of the urban population to 80 percent. However, just an increase to 47 percent would have required all the resources proposed in Repelita V (World Bank, 1991a).

Other problems affect the water sector. Leakage from systems is high -- about 40 percent, on average, in large cities, and elsewhere, up to 60 percent. (Leaking water pipes and inadequate water supply lead to low water pressure; this, combined with the use of home suction pumps, leads to the sucking of contaminated surface water into the municipal supply system; treated water provided directly to homes, at great expense, becomes unfit to drink; and paying customers are unwilling to pay the cost of piping polluted water to their homes.)

PDAMs are often unable to provide a clean source of water to their customers. Many PDAMs remain financially weak. Key performance issues affecting water supply are as follows:

- *Lack of strategic action plans to cope with growing raw-water shortages.* Many Indonesian cities have already used up the capacity of the nearest local rivers, where extraction costs are lowest. Many cities face a painful dilemma: either make massive investments to draw water from distant sources resulting in high-cost water and increasingly negative cash flows; or go without these new investments and limit economic growth.

- *Decreasing water quality.* Even when piped water is available, untreated city sewage, pollution from septic tanks, and industrial waste increasingly degrade its quality and that of rivers from which PDAMs draw, increasing costs or making treatment uneconomic. Even industries cannot use the water from the main river in Surabaya for four months of the year. Household surveys of Jakarta and Ujung Pandang (Chifos and Lubis, 1991) show that above 80 percent of respondents are unsatisfied with the quality of their water. Households are willing to pay more for better water. Water vendors succeed in charging households many multiples (5-10 times in Jakarta and Ujung Pandang) the price that PDAM charges.

- *Groundwater degradation and depletion, and lack of enforcement of regulation.* Groundwater is a valuable resource. Properly managed it can provide a long term supply of clean, inexpensive water for a variety of purposes. As long as the rate of extraction does not exceed the rate of infiltration from underground sources and as long as those underground sources are reasonably protected from contact with contaminated surface water then there is little problem in the use of ground water.

Groundwater in Indonesia's urban areas and in most of the developing countries of Asia has been treated almost as a free good. Like most such goods whose price does not reflect its true scarcity value, it is extracted used (and wasted) far more rapidly than it is replaced and in far greater quantities than the nation can afford. The price typically reflects only the cost of extraction, which is far below the value of the damages it imposes on the society. These damages include the following: (1) the drying out of previously existing shallow wells; (2) the contamination of new and existing wells by intrusion of salt water and contaminated surface water; (3) the collapse of underground aquifers and subsequent subsidence of land under building sites, thus leading in turn to flooding, broken pipes and wiring, and collapse of buildings; and (4) the presence of illegitimate groundwater users decreases the pool of potential customers for piped water, thus increasing per capita expenditures and costs for legitimate users.

- *Financial management, autonomy of PDAMs, and pricing.* Water pricing is particularly difficult because of its "social" importance. At present, water tariffs are supposedly set to recover the full cost of production (O & M and some measure of capital costs), provide for income distribution through a social tariff, and provide for fiscal distribution to local authorities through a tax on "profits." Currently, most PDAMs fail to achieve these targets, failing to pay for any depreciation and capital formation.

2.3.2 Sanitation

The sanitation systems of Indonesian cities remain extremely undeveloped. Despite recent construction of new sewer systems in Jakarta, Bandung, Medan, Surabaya, and Semarang, operating sewer systems serve less than five percent of residents in urban areas (USAID, 1991). Government also constructs public toilets under the Kampung Improvement Program and has responsibility for maintaining ditches and drainage systems.

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Government spends relatively little on sanitation. In comparison to the substantial expenditures in the water sector (38 percent of the total), environmental sanitation represented only 11 percent of total urban investment in the Cipta Karya sub-sectors from 1986/87 to 1991/92 (Annex 3).

Most households provide their own sanitation facilities. Approximately 35-40 percent of urban residents have access to sanitation facilities equipped with either a septic tank and drainage field or with a leaching pit. The remainder of urban residents use facilities that discharge directly to the surface drainage network, to septic tanks without a drainage field (which, therefore, overflow into surface drainage) or to deep pits. Important performance issues in this sector are as follows:

- *Little treatment of human waste and lack of enforcement of regulation.* Most cities cover only a fraction of their urban populations with sewers and provide no or little sewage treatment. Only a small fraction of households hire private companies to drain their septic tanks with de-sludging trucks because of the high cost. Even if willingness to pay increased, little treatment capacity for sludge pumped from septic tanks exists.[6] The great bulk of households desludge their septic tanks manually into ditches themselves, often by hiring inexpensive day labor.

Although the GOI has laws that permit such regulation, many cities fail to require new formal-sector residential development to provide sewer systems. Typically, developers opt to avoid this cost and build septic tanks. Downtown businesses also often discharge directly into ditches rather than the sewer system. The high densities in kampungs -- sometimes over 500 people per hectare relative to city averages of around 100 people per hectare -- force location of septic tanks closer than the 10 meter minimum distance from shallow wells recommended by health codes.

- *Low public awareness of the health consequences of poor sanitation.* Households surveys in Jakarta and Ujung Pandang (Chifos and Lubis, 1991) show that many people do not clearly connect diseases such as diarrhea, typhoid, and para-typhoid with poor sanitation that contaminates their water supply. Other uses of money -- such as buying a television or investing in a business -- often take precedence over building or cleaning a septic tank. In contrast, residents appear to pay more attention to the aesthetic aspect of sanitation. GOI's clean cities award (ADIPURA, see Section 3.4) has succeeded in stimulating people to clean up by appealing to civic pride in the look and smell of their city, not by focussing on health concerns. The problem of public awareness intertwines with that of low incomes. People making no more than the minimum wage have great difficulty paying for better sanitation.

- *Financial problems of agencies with responsibility for sanitation.* Conventional water-borne sewage systems are expensive. In Bandung, the sewer coverage rate (40 percent of the

[6] Stabilization ponds for septic-tank pumpage have been built in Surabaya, Jakarta, and Ujung Pandang, but cover a small part of need.

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population) and treatment rate (25 percent of the population) are higher than for any other Indonesian city. But the PDAM there faces severe financial problems in paying off its debt from the $60 million loan that helped build this system. Low awareness of the connection between sanitation and health make cost recovery and, hence finance of sanitation systems, extremely difficult.

Sewerage tariffs are calculated to recover only operations and maintenance costs, not the original capital costs or replacement. Typically, regulations require commercial customers -- especially large commercial buildings and hotels -- cross-subsidize residential customers. Public subsidies have a role in sewage treatment because its public health and environmental benefits exceed the willingness of households to pay. However, these subsidies need to be carefully managed and part of an improved cost recovery effort. Because of the high cost of installing conventional water-borne systems in existing cities, sanitation is a sub-sector where experimentation with new technologies -- both at the community and city level -- will be essential.[7]

2.3.3 Solid Waste Management

Solid waste management in many Indonesian cities is, by international standards, seriously deficient and deteriorating. On average, some form of garbage collection serves only 40 percent of households; the largest cities cover 60 percent, while cities of around 100,000 people typically serve only 20 percent (USAID, 1991). Coverage varies by income as well: 70 percent of wealthy households receive service compared to 19 percent of the poor. Under Repelita V, GOI allocated $220 million for improving solid waste management, but this sum represents only about two-thirds of that necessary to meet the plan's goal -- raising household coverage from 40 to 70 percent.

Typically, neighborhood leaders organize the collection of solid waste directly from households and have more control over charging for this service and disposal than the "municipal cleansing agency" (Dinas Kebersihan or DK). The DKs' job becomes transporting this waste from temporary collection points to a sanitary landfill. Attempts made by DKs to displace the neighborhood organizations in this function often fail.

In some cities, private companies have a role in both primary collection and transportation from secondary collection points to the dump site. Private companies collect garbage in 27 of Jakarta's 264 Kelurahans. Most notably, P.T. Sarana Organtama Resik services 17 kelurahans and has a number of private contracts for areas served by DK that desire better service. The following are the main performance issues in this sector:

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[7] Continuous micro-filtration is an example. This system works by forcing water through thousands of thin polyethylene tubes with pores small enough to filter out bacteria and viruses. An Australian company has built a $1.7 million demonstration of such a plant capable of treating 3 million liters of sewage daily. Such plants have the potential to revolutionize water-treatment infrastructure and replace huge centralized systems connected by hundreds of kilometers of pipes with compact units next to the communities served.

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- *Control of revenue collection by the neighborhood organizations, poor cost recovery, and poor financial management in most cities.* DKs in cities over 100,000 cover an average of only 28 percent of their operation and maintenance costs -- overall, DK receipts cover only 5-10 percent of their total costs, including capital and land (Cervero, 1991).

The loss of potential revenue is one of a number of factors that discourage DKs from providing good service. In addition, they must meet civil service and other requirements that greatly reduce their incentive and ability to manage operations efficiently. DKs often blame poor transportation from temporary collection sites to landfills on the age of their truck fleets, which have a high proportion of vehicles out of service. In Ujung Pandang, for example, only 50 of the DK's 90 trucks are in operation.

- *Demonstrated potential for improved financial management through administrative and billing reform.* A number of cities have made dramatic advances in increasing cost recovery and the efficiency of public garbage collection. Two innovations appear key to this improvement (Cervero, 1991): transforming DKs into independent public enterprises (PDKs), which increases flexibility and creates incentives for better operation; and charging for solid waste collection in tandem with water or electric bills. Campaigns by mayors have also played a role in getting the public to pay.

2.3.4 Land Development and Use

The impact of land use cuts across water, sanitation, and solid waste management. Development over aquifers and water recharge areas pollute urban water supplies. Tight land markets caused by regulation and oligopolies raise land prices and force low-income people, in particular, onto the most environmentally precarious sites, such as lowlands subject to floods. Alternatively, high densities in inner-city kampungs rise and contribute to contamination of shallow wells by many septic tanks. Concentration of offices and business in one city center helps cause long commutes, air pollution from auto use, and high densities.

Key performance issues in this area are:

- *Inappropriate development regulations.* The land titling and development approval system is a complex, lengthy procedure. Many aspects have some effect in hindering development and creating land shortages. However, the first step in this process -- acquisition from government of a "location permit" -- is often the most important bottleneck (Hoffman and Ferguson, 1991).[8] In effect, the location permit allows the developer to hold

[8] After informal talks with local government officials, developers typically make a formal submission to develop a parcel of land. On approval, the developer is given a location permit. Essentially, the location permit reserves this piece of land for the development company that receives it even though this company may not own the land. No other developer can buy and develop the land within the permitted area against the wishes of the permitted developer. Typically, the permitted developer renews this location permit for long-periods--10-20 years--and gradually buys the land and develops it over this period of time

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land out of development -- to hoard it for speculation or future use -- at low cost. In comparison, land titling and zoning have a relatively minor impact on development.

- *Oligopolistic land markets.* Concentration of ownership tends to limit competition and raise land prices.

- *Lack of roads.* Because of transportation bottlenecks, access is the key to land value in much of urban Indonesia. The lack of adequate road access greatly limits the amount of land suitable for development in Indonesia's large cities.

Joined with potential conflicts between different public agencies on basic land-use issues, these factors have contributed to raising the price of urban land and constraining the supply of urban land available for development. These problems hit low-income households hardest, forcing them to live in increasingly crowded conditions often on environmentally sensitive lands and almost always without the benefit basic public services.

3. INSTITUTIONAL ANALYSIS

3.1 Introduction

Among developing countries, Indonesia has had an unusually strong commitment to environmental management (Fisher, 1991). BAPPENAS established a Bureau of Natural Resources and the Environment in 1972. A new State Ministry concerned with the environment was formed in 1976, later renamed the Ministry for Population and the Environment (KLH). The Environmental Management Act laid the legal foundation for environmental regulation in 1982. In 1986, GOI issued national regulations for environmental impact assessment -- the AMDAL process. By 1990, 55 environmental study centers had been created in public and private universities. The national Environmental Impact Management Agency, BAPEDAL, was established in July 1990. Over 300 NGOs are active in environmental issues. However, environmental institutions and processes are still new and face daunting challenges.

This section reviews the roles and activities of key environmental institutions: the Ministry of Population and the Environment (KLH) and BAPEDAL; the Clean Rivers Project (PROKASIH); the Clean Cities Award (ADIPURA); the environmental impact assessment process (AMDAL) -- generally, and specifically within the Ministry of Public Works; and NGOs oriented to environmental improvement.

3.2 The Ministry of Population and the Environment

From its inception in 1978, KLH has had primary responsibility for coordinating environmental management (Fisher, 1990 and KLH, 1991a). KLH has four branches

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(Asmen). Asmen I tracks population statistics and other demographic information to formulate policy. Asmen II has had programs for: (1) national resources management including adoption of standards; (2) spatial planning; (3) geographic information systems; (4) joining resource management and land-use planning; and (5) conservation and bio-diversity. Asmen III's main role is planning, policy making, and strategic development for environmentally damaged areas -- such as mining areas. Asmen IV trains KLH staff, operates a computerized information management center, liaises with NGOs, does media out-reach, coordinates an AMDAL information center, has a resources library, and provides resource economics and accounting information.

3.3 The Pollution Control Agency (BAPEDAL)

Before the creation of BAPEDAL in 1990, provincial governors had responsibility for environmental management at the regional level -- that is, implementation. This system failed to work because the sectoral departments through which governors operate had little interest in environmental matters (Makarim, undated). During its first ten years, KLH focussed on increasing public awareness. However, its Minister had long wanted to move beyond public awareness to implementation. This led to his sponsoring the creation of a new interministerial board and agency for pollution control -- BAPEDAL.

In June 1990, a Presidential Decree established the Environmental Impact Management Agency (Badan Pengendalian Dampak Lingkungan -- BAPEDAL). BAPEDAL's mandate is to: (1) assist the President in formulating pollution control policy and other tasks, as needed; (2) hazardous waste management; (3) monitor and control activities with important environmental impacts; (4) develop a laboratory and handle pollution control data; and (5) promote public participation.

BAPEDAL operates with 16 Strategic Management Units (SMUs), assigned to different pollution control activities (KLH, 1991a). These SMUs have responsibilities for: (1) surface water pollution control; (2) ground water pollution control; (3) environmental degradation control; (4) small-scale industry impact control; (5) environmental impact assessment; (6) enforcement; (7) air pollution control -- mobile sources; (8) air pollution control -- stationary sources; (9) coastal pollution control; (10) sea pollution control; (11) noise pollution control; (12) national contingency plan; (13) hazardous waste management; (14) emergency response; (15) the Clean Cities Program (ADIPURA); and (16) sewage pollution management.

3.4 The Clean Cities Program (ADIPURA)

The ADIPURA program is of particular interest because it deals with the urban environment. It is an award to show appreciation to mayors who have done a good job in the environmental management of their city. The program has been in effect since 1986, at one

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time under the auspices of the Directorate General of Urban and Regional Development in the Ministry of Home Affairs but now under BAPEDAL. The President gives yearly awards to cities in four different size categories that meet acceptable criteria of cleanliness[9].

Overall, the program gets good results by appealing to civic pride and motivating residents to help their city win. The number of cities that participate has grown steadily.[10] KLH also names cities with the dirtiest environments. Once labelled, these cities sometimes get motivated to clean up.

3.5 The Clean River Program (PROKASIH)

The first priority of BAPEDAL, however, is surface water pollution (Jardine, undated). The Clean River Program (Program Kali Bersih or PROKASIH) seeks to implement surface water pollution control and is BAPEDAL's flagship program, created in 1989.[11]

PROKASIH began by consulting with provinces to select stretches of river degraded by industrial pollution. They identified the 20 most polluted rivers, and targeted the program to reduce industrial discharges along limited stretches of these rivers.

PROKASIH set an initial goal of reducing pollution loadings from the most polluting industries in these stretches by 50 percent. Each governor entered into voluntary written agreements with each of these industries for reductions in their pollution loadings using three simple parameters that local laboratories can measure to assess results: biochemical oxygen demand, chemical oxygen demand, and total suspended solids. In 1991, PROKASIH replaced the three parameters with pollution control standards suited to each of 14 different industries in the eight most industrialized provinces. The effluent from industry was monitored every three months.

PROKASIH has achieved striking success in important ways. Most fundamental, it has established a system of pollution control and monitoring at the provincial level where none previously existed. PROKASIH has also enhanced its effectiveness by targeting a discrete, soluble problem and carefully adding only what the program can handle. PROKASIH's

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[9] Cities send in standard application forms about 50 pages long that require collection of data, photographs, and other information. A multi-sectoral/multi-agency team reviews the materials and chooses cities that meet the criteria to visit. The visit provides an event to affirm and publicize the mayor's efforts. The city makes presentations to the team. Each city that receives a satisfactory score gets an award.

[10] 57 cities applied in 1992 and 24 of these won awards, compared to only 2 winners in 1986.

[11] Because of rapidly decreasing river water quality, even companies had begun complaining that water treatment was too expensive. A water quality control program had existed before PROKASIH, but was uncoordinated. PROKASIH is the first national program to address surface water quality.

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focus, of course, also limits its scope. BAPEDAL is well aware that its success in reducing pollution loadings of the largest industries has a small impact, even on the rivers it targets.[12]

BAPEDAL and KLH's strategy is to achieve success on discrete problems and build their institutional influence with these successes and by educating key-decision makers in other Ministries. Neither organization has plans to try to tackle such large, complex issues as household waste, although household waste is essential to their primary goal of clean surface water.

3.6 The Environmental Assessment Process (AMDAL)

The Environmental Management Act of 1982 provides the legal basis for environmental assessment in Indonesia. As with most laws, it did not provide operational guidelines. Ministerial decrees beginning in 1987 have provided such guidelines which thus define the environmental assessment process: Analisa Mengenai Dampak Lingkungan, or AMDAL.

3.6.1 The Process

The AMDAL process is set up to: (1) screen projects to determine if they need preliminary environmental information reports (PILs), detailed environmental assessments (ANDALs), or are exempt; (2) provide guidance for carrying out PILs and ANDALs; (3) guide the preparation of environmental management plans (RKLs) specifying mitigatory measures and monitoring plans (RPLs); (4) condition project approval upon approval of RKLs and RPLs based upon findings of PILs and/or ANDALs; (5) assist Ministers and provincial Governors in establishing environmental review commissions -- Komisi Pusat and Komisi Daerah -- to provide a basis for project approvals; (6) require public notification and participation in review of PILs and ANDALs; and (7) establish a time limit within which a Minister or Governor must act after submission of assessments by the review commissions.

The AMDAL process applies to all new public development and urban infrastructure projects in general.[13] Thus, since its inception in 1990, AMDAL has covered all new AID-sponsored investments under HG-001. The AMDAL process would be applied to all urban infrastructure projects under a new HG program, whether funding is channelled through Cipta Karya or under the Regional Development Account. It applies to projects funded and

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[12] For instance, waste from large industries contributes only 6 percent, by one estimate, to biological oxygen demand of the Ciliwung River--one targeted by PROKASIH in DKI. The great bulk of the remaining 94 percent comes from household waste. However, domestic waste is a much less discrete and more intractable problem than industrial waste. BAPEDAL is likely to begin to address domestic waste in a similar fashion to PROKASIH--by targeting large polluters such as office buildings, hospitals, and hotels

[13] A parallel process, named SEMDAL, was established for existing projects, but ends in December 1992.

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developed both centrally and locally.

KLH and BAPEDAL have overall responsibility for guidance and support of the AMDAL process. However, each Ministry implements the process for its own projects -- with provincial and regional environmental review commissions. Thus, there is not one AMDAL process, but many, and they vary between Ministries and, even, between Directorates General within Ministries.

3.6.2 Operating Problems

Not surprisingly, the task of rapidly introducing the AMDAL process has encountered difficulties. Fisher (1990) notes the most important: First, the technical quality of AMDAL reports and their evaluation by Central and Regional Commissions and by Investment Coordination Boards (discussed below) has been uneven. Typically, consultants prepare AMDALs for infrastructure projects. GOI staff are responsible for management (as project proponents) and evaluation (as members of central and regional commissions).

It is reported that few consultants and GOI staff have adequate skills and training for their task. AMDAL study courses at university environmental centers tend to be general and long -- often several months. AMDAL studies are also said to be general and descriptive rather than focussed and problem-solving. Consultants, who are paid by the project proponent, may be less likely to find negative impacts than an impartial observer. Generally, no meaningful community participation occurs.

Secondly, AMDAL is not thoroughly integrated into the project cycle. Thus, by the time mitigatory measures and monitoring plans (RKLs and RPS) are ready, most projects have already reached the stage of land acquisition and completion of detailed designs. The costs of unexpected changes at this point are often reportedly considered unacceptable, whatever the environmental impact.

A related third problem involves central and regional Investment Coordination Boards (BKPMs and BKPMDs), which issue licenses for projects involving tax and other incentives in all sectors. Although these Boards take AMDAL into account, official procedures make it the "last step", which reduces its importance. Thus, Investment Boards often bypass or make their decision before AMDAL findings appear. One evaluation of the AMDAL process for BAPEDAL (Hohn and Bailey, 1991) found the low importance given to AMDAL by Investment Boards to be its main problem.

3.6.3 Approaches to Strengthening AMDAL

The gap between AMDAL's objectives, and implementation, is understandably large. Four themes have been suggested in strengthening AMDAL (Fisher, 1990):

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- *Human resources and training*. Environmental analysis and assessment is still a very new topic in Indonesia. Little expertise exists. Many Ministries have training programs for AMDAL underway, either in-house or through sending their staff to PSLs, but this training could be improved and expanded. Coordination among different Ministries' environmental training programs also promises dividends.

- *Reduce overlaps and coordinate with other agencies*. Many groups of organizations have some role in the environment: KLH and BAPEDAL; the line ministries and non-departmental agencies; provincial governments; local governments; universities and PSLs; and public and private enterprises. Clarifying responsibilities and coordinating the efforts of key Ministries will be important in improving the process.

- *Link AMDAL with the project cycle*. Project managers give environmental concerns low priority and tend to tack them on at the end of projects, as do Investment Boards. Environmental assessment should be pushed forward to the beginning of the project cycle before projects have proceeded so far (e.g., land and licenses acquired) that they are, in practice, impossible to change.

- *Establish regional environmental monitoring and leading, eventually, to compliance*. BAPEDAL and KLH have little presence on the ground in cities and provinces. Other ministries -- particularly MPW -- are much more deconcentrated. However, the evidence suggests that they, too, have little environmental monitoring capacity at the regional level.

3.7 AMDAL in the Ministry of Public Works

The Ministry of Public Works is one of the leaders in developing and applying AMDAL. The three directorate generals within the Ministry -- Human Settlements (Cipta Karya), Roads (Bina Marga), and Water Resources (Pengairan) share one EIA Commission and Technical Team and operate under overall guidelines. However, each Directorate General also has considerable control over its environmental assessment process.

3.7.1 Process Steps, Rules, and Responsibilities

The process starts with the project proponent, typically either the MPW Directorate General or, for urban infrastructure, a local government. The key figure is the project manager, who has the direct responsibility for project development, but also for arranging for the environmental assessment process and incorporating any required mitigation measures in implementation.

Each Directorate General has a Working Team. These teams screen all projects and place them in one of three categories: exempt from any environmental assessment, subject to preliminary environmental assessment (PIL), or subject to full environmental assessment (ANDAL). In contrast to some ministries that deal with a few dozen large projects each

year, each of the three Directorates General of MPW deals with thousands of projects annually. Therefore, the Working Teams use common sense joined with standards to screen projects.[14] MPW staff interviewed during the course of project design suggested that these screening procedures are a problem at present. Too many projects are assigned the ANDAL -- an expensive and time-consuming process (see below). The screening procedures for RPLs and RKLs are also seen as problematic.

The proportion of PILs, ANDALs, and "exempts" varies greatly between the three Directorates General. For instance, about 70 percent of Pengairan's (Water Resources) projects get ANDALs, while only 10 percent of Bina Marga's and 25 percent of Cipta Karya's projects do. The substantial environmental consequences of land acquisition for building dams and distribution networks (displacing many households, erosion, use of agricultural land etc.) explain the high share of ANDALs for water resources.

While project managers are generally encouraged to prepare PILs in-house, they contract the preparation of the great bulk of ANDALs to consultants, including private firms, environmental study centers at provincial universities, and -- if the project requires special expertise and is large -- foreign consultants.[15] Typically, ANDALs cost at least Rp. 50-75 million and take six months or more to complete. An ANDAL is expensive and time-consuming.

On completion, the ANDAL or PIL (sometimes with accompanying RKL and RPL) is submitted to either the EIA Central Commission (for centrally funded projects) or EIA Regional Commission (for regionally funded projects) for approval, often with mitigating measures recommended. The Technical Team assists the EA Commission in assessing the project.

Interviews during project design indicated that projects are rarely flatly rejected because of AMDAL, but mitigation requirements are often applied. The project manager has responsibility for incorporating these measures and overseeing their execution. In theory, a working unit of 5-10 people under the direction of the head of a local testing laboratory monitors the construction and, on completion, the operation of projects to ensure that mitigation measures are implemented. In practice, this working unit seldom has a sufficient

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[14] For instance, Bina Marga (Roads) Working Team generally assigns a road improvement project without widening generally a PIL. However, if such a project seems to have unusual environmental consequences, it might be assigned an ANDAL. In contrast, toll roads typically require an ANDAL. Depending on the outcome of the PIL or ANDAL, an environmental management plan (RKL) or monitoring plan (RPL) is prepared.

[15] The project manager negotiates with the consultant on the terms of the assignment. The fee depends on the consultant's experience. A monthly fee for a local consultant with substantial experience averages about Rp. 5 million. For road projects, the average ANDAL takes 10-15 person months, and often takes six months or more to prepare. Hence, the total cost is Rp.50-75 million ($25,000-37,000). This sum comes out of the project's budget.

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budget and little monitoring gets done.

Generally, since the project manager's main responsibility is to get the project built, and there are few incentives or penalties to promote incorporating environmental concerns, the effect of environment assessments and mitigation plans is often weak.

3.7.2 Problems and Proposed Solutions

A team sponsored by the Asian Development Bank (ADB) is now completing a project aimed at strengthening AMDAL within Cipta Karya. Their main findings and outputs are as follows:

- *Training and Human Resources.* MPW has made efforts to develop the AMDAL process in-house and to train staff. To date, over 1,000 staff have been trained in, at least, the rudiments of environmental problems and management. Training has been provided by the Indonesian university system -- particularly its Environmental Studies Centers -- which has developed a basic environmental curriculum of three courses. Level A is the beginning principles of the environment. Level B is for evaluation of environmental assessments. Level C is for preparation of environmental assessments.

The skills of most people at all levels of the AMDAL process within MPW, however, are still inadequate in relation to their responsibilities (this includes members of the EIA Commissions, the Technical Teams, and the Directorate General Working Teams in the three Directorates General).

- *Preparation of manuals, screening and standard operating procedures, and training materials.* A major product of the ADB project was the preparation of a 300-page manual on environmental management of urban development to assist in incorporating mitigation measures into projects.[16]

The ADB team also has sought to simplify screening procedures and better define when projects pass from one phase to another -- such as from preliminary environmental assessment (PIL) to environmental management plan (RKL) -- and tried to decrease the number of unnecessary AMDALs and, hence, the expense and length of environmental assessment.

- *Monitoring at the provincial level.* A key problem running throughout environmental assessment and pollution control in Indonesia is the lack of a provincial presence for monitoring and, eventually, enforcement. In contrast, the MPW has a strong presence at the

[16] The idea is that project managers and ANDAL preparers and evaluators are able to look up a problem and find environmental mitigation measures to incorporate into the project. This manual supplements the official Cipta Karya guidelines and official approval is being sought to make parts of it an appendix to these guidelines.

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provincial level and, in theory, a working unit headed by the director of local laboratories in place for monitoring. However, the capacity at this level is not yet strong. The MPW technical staff interviewed for this study suggested two crucial next steps: (1) make the environment a priority of the project managers; (2) establish units to manage and monitor the environmental effects of projects at the projects level

Various means exist to support this logical and necessary evolution. However, for these measure to become feasible, a third task is crucial: increase the influence of the sub-directorate in charge of the AMDAL process within Cipta Karya and the other two Directorate Generals.

- *Increase the influence of units and the prestige of staff involved in the AMDAL process within MPW.* A major problem of AMDAL within MPW is that its status is low and the people that work on environmental assessment get few career rewards for it. Cipta Karya is a good example. The unit in charge of AMDAL is the section of Impact Development (Assessment Dampak). Structurally, this unit is under a sub-directorate and has a low structural position. Its staff currently consists only of three people, including its head.

The overall problem is that AMDAL has no structural position within Indonesian government: it only has functional status. Hence, basing a GOI career on being an environmental expert is problematic. Staff that take time from their structural duties to help out on environmental assessment receive little credit for this activity. Changing AMDAL positions from a functional to a structural classification would require a decision at a high level within GOI, and it appears unrealistic to expect this to happen in the near term. However, as noted, other steps can be taken to increase the influence and status of AMDAL within MPW and Cipta Karya.

3.8 The Lack of Enforcement

A major drawback of PROKASIH and the AMDAL process is the lack of a serious threat of enforcement (Fisher, 1990). This problem has both a legal and administrative aspect.

3.8.1 Lack of a Legal Basis for Enforcement

Many programs -- such as PROKASIH and AMDAL -- started without lawful enforcement mechanisms and, to date, there are no legally based sanctions for non-compliance with their requirements. With few exceptions, the main enforcement mechanisms have been informal -- public pressure and embarrassment.

The case of PROKASIH and industrial pollution is illustrative. The 1982 Environmental Management Act allows police action to shut down polluting activities, but only on proving that ambient pollution levels come from a particular source -- a virtually impossible task in

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most cases. In addition, PROKASIH and other pollution control efforts have no licensing system.

With no legal mechanisms of enforcement, KLH has used many ingenious informal mechanisms to secure compliance (Jardine, undated). PROKASIH has used letters of understanding with industries to specify pollution reduction targets. Governors summoned the heads of these industries to mass signings. When over 400 industries in Jakarta failed to meet the targets specified in the letters of understanding, their names were published in the press. These informal mechanisms have succeeded in exercising considerable pressure and effecting some compliance.

On a handful of occasions, administrative action has shut down a factory. DKI forced P.T. Tribor -- a London-based company -- to shut down its glucose operation pending installation of pollution control.[17] BAPEDAL and KLH have a schedule to develop legal mechanisms of enforcement based on effluent standards and other criteria.[18] In the meantime, the lack of legal enforcement mechanisms hampers pollution control and the AMDAL process.

3.8.2 The Lack of Regional Presence

A key issue facing BAPEDAL is the structure, authority, and function of pollution control at the local and regional levels (KLH, 1991a). Currently, KLH and BAPEDAL function at the central level with offices in Jakarta. The legislation that created BAPEDAL and its development plan call for regional BAPEDALDA in each province and local BAPEDALDA at the municipal level. However, BAPEDAL has yet to establish these offices. In effect, KLH and BAPEDAL has little presence on the ground and the prospects for establishing a forceful presence are unclear.

3.9 Environmental NGOs

Over 2,000 NGOs exist in Indonesia, many with some role in the environment. Most have started very recently, during the 1980s. Student activists staff many of these organizations.

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[17] This action forced the company to look at the factory's production process and management. The firm discovered many problems, restructured the plant, and has, reportedly, paid for pollution control out of the savings from these improvements. Thus, pollution problems are often symptomatic of production and management difficulties.

[18] For instance, Minister Salim has promised that smoke-belching vehicles that emit black smoke for 10 seconds or over will be subject to fines by mid-1993 and that emission of harmful products from various industries will "be brought down to tolerable levels" within four years. "We are now in the phase of informing the public, but we will impose penalties when the time comes" (Jakarta Post, July 4, 1992). Some polluting technologies have been banned, including the mercury cell technique for chlor-alkali operations that produce chlorine products and caustic soda. Although all letters of agreement have been based on end-of-pipe discharges, KLH and BAPEDAL are examining changes to industrial processes as well.

Although passionate advocates of their cause, most lack the training to function effectively and have an impact.

Only a handful of NGOs are potentially significant players in environmental issues. WALHI -- an umbrella organization of 200 environmental NGOs headquartered in Jakarta -- acts as an advocate and channels fund, much of it from donors, to some of its members. SKEPHI (Sekretaria Kercasma Hutan Indonesia) deals mostly with forestry issues and has the reputation for vocal and radical advocacy that criticizes industry and government. YLK (Yayasan Lembaga Konsumen) is one of the oldest NGOs in Indonesia. It is a relatively well-organized consumer group. LBH (Lembaga Bantuan Hukum) is a legal aid foundation active in human rights and environmental land issues.

NGOs have acted primarily as advocates on environmental issues. Occasionally, this activism has helped stop an environmentally damaging project or get reparations for villagers affected by pollution.

4. URBAN ENVIRONMENTAL QUALITY MANAGEMENT: A SUGGESTED APPROACH[19]

4.1 Introduction

This section begins with a summary assessment of the key problems with current urban environmental quality management (UEQM) institutions and approaches in Indonesia, based on the reviews in Sections 2 and 3. It then explains some of the elements of a UEQM strategy, and suggests how a new and more forceful approach to UEQM may be built into the fabric of Indonesia's decentralized urban development program.

4.2 Need to Improve Current UEQM Institutions and Approaches

It is clear that the concern about environmental degradation is increasing markedly among residents of Indonesia's cities. The reviews presented in the sections above suggest that, although the GOI is making a sincere effort to begin to address the problems, they do not give clear confidence that the efforts are either forceful enough or focused enough to deal with the issue effectively at scale.

How can Indonesia's approach to UEQM be strengthened? It is argued here that approaches to date have not recognized two fundamental lessons that are the keys to a more forceful approach. The first is based on international experience: *UEQM objectives must be built into initial urban development planning processes (after-the-fact assessments are necessary, but*

[19]Arguments and approaches suggested in this Section are adapted largely from Kingsley and Ferguson, 1992.

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alone insufficient to have a major effect on environmental trends). The second is perhaps the most basic lesson already learned by Indonesia with respect to urban development: *local leadership is likely to be much more effective than central government in directing the urban development process, including UEQM, in individual cities.*

There is no doubt that Indonesia's AMDAL process is a basically sound approach and that a high priority should be given to strengthen it. The view presented here is simply that AMDAL alone is neither the sole, nor even the most important, component of an effective UEQM process. The logic for this view starts with evidence on the failures of earlier "after the fact" environmental impact assessments in many other countries (e.g., the United States) where they have been applied more diligently than they have to date in Indonesia.

In the traditional project planning and design process, developers and their design teams (public and private) make decisions through a complex series of tradeoff analyses (some are explicit and quantified, most normally are not). A particular site plan or route design is put forward and then evaluated, balancing the quality of the physical product (in relation to specific project objectives) against its cost. This may occur solely within the mind of the principal designer, or as a part of joint decision making by a team, or most often, as a mix of both. In all cases, many adjustments are made as the work proceeds. The process takes time and resources and the participants build strong allegiance to what they have created along the way. When a group of "outsiders" then assesses the design from an environmental point of view and recommends changes, the development team and its sponsors are naturally likely to resist. And evidence from around world indicates they can be very powerful in doing so.

The point is that *environmental considerations need to be there at the very moment that other types of tradeoffs are being assessed*; every trial design needs to be considered from the point of view of product quality (in relation to project objectives), cost *and environmental impact* at the same time. This does not mean that there will be no continuing need for outside pressures. Regulations, taxation, fees and other techniques will always be important to create strong incentives for design teams to give enough weight to environmental impacts (the longer term objectives of sustainable development) rather than short run outcomes alone. Nonetheless, it is clear that UEQM goals will not be achieved by such pressures alone. Environmental considerations must be brought inside initial planning processes.

4.3 Elements of a Local UEQM Strategy

What should be the components of an effective local UEQM strategy? It is impossible to answer that question definitively since the priorities of individual local governments can legitimately differ. Some themes, however, are likely to be applicable in most cities. The following paragraphs illustrate approaches that should be applicable in urban Indonesia. These approaches can be grouped into six basic substantive elements that together comprise most of what UEQM needs to accomplish: (1) water supply; (2) household wastes; (3)

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industrial wastes; (4) transportation; (5) urban land development and use; and (6) programs providing economic incentives, effective regulation, and stimulating environmental awareness.

4.3.1 Water Supply

Contaminated water probably represents one of Indonesia's most serious health problems. Assuring the provision of an adequate supply clean water to the growing populations of its cities must be a primary environmental goal, and affordability studies suggest that almost all of those populations should have the incomes needed to support its achievement. There are three key principles: The first, is to provide a mix of services that match customers' willingness and ability to pay -- and then to insist on recovering full costs. Doing so will not only meet financial needs but also provide strong incentives for conservation. Greater analysis of demand, the cost of different options for environmental infrastructure, and the external (community-wide) benefits associated with each is needed before pricing decisions can be made.

The second principle is to recognize that the most cost-effective way to provide water for new populations today is to cut down on waste in current water usage (rather than to draw totally new supplies). This can be accomplished through better maintenance and repair programs to reduce leakage; sensible recycling (e.g., reusing partially treated wastewater for functions like irrigation, industrial cooling, and toilet flushing); and demand management techniques (including technological improvements like showerheads that markedly reduce water use, as well as financial incentives like requiring firms to pay fees to dispose of industrial wastewater).

The third is to adjust the current institutional framework for water supply. Recent research suggests that public institutions responsible for setting set water tariffs and formulating and enforcing regulations should ultimately not retain direct production and distribution responsibilities themselves; rather they should be charged with establishing an environment that will enable and facilitate the work of a variety of competitive providers. Private firms can play a much expanded role, either by competing from time to time to operate city-wide systems or to perform sub-functions for public agencies. NGOs and community groups should also be encouraged to take on more responsibility for water distribution in specific communities.

4.3.2 Household Wastes

The share of Indonesia's urban population with access to basic sanitation is much lower than that with adequate water supply. As noted earlier, an extremely small share of the sewage that is collected is ever treated before disposal. Also, too small a percentage of all of municipal solid wastes is collected -- much of the rest often dumped in drainage canals. Themes for improvement here parallel those for water supply: recovering a large part of the costs from users (although it is recognized that given the externalities implied, some

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subsidization is warranted for treatment and disposal if not for collection); recycling (in addition to the reuse of liquid wastes noted above there are many opportunities for recycling solid wastes, some of which are already being exploited by informal enterprises that could be moved up to become stable and efficient businesses); and institutional change (again, involving community groups in responsibilities for intra-community collection systems is promising).

With regard to sanitation, there is a need to expand the range of technical options being applied. Realistically, collection by conventional piped sewers is the only option for the high-density cores of most Indonesian cities (and considering land values there, it should be feasible to require developers to provide them and occupants to pay the required cost), but most urban residents cannot afford this level of service. Low-cost on-site options (ventilated improved pit latrines and pour flush latrines) can substantially reduce the negative health and aesthetic effects of untreated human waste, but these options remain near the low end of the spectrum and are not satisfactory everywhere. A promising alternative at an intermediate level is the small-bore sewer: solids are collected in an on-site tank before they reach the sewer connection, so that it becomes possible to use smaller pipes, lay them at flatter gradients, and use fewer manholes -- all of which can substantially reduce cost. Further savings are possible where the households in a block develop a joint system in which pipes are run from yard to yard before reaching the street sewer (rather than the conventional approach of having each house independently connected to the street sewer) and where they assume joint responsibility for maintenance inside the block. Vacuum cartage systems offer another intermediate cost option that has been successfully applied in some cultures.

4.3.3 Industrial Wastes

Asian countries generally have made little progress in controlling wastes generated by industry. The lack of political will and perceived high cost of industrial pollution control are key obstacles. Indeed, cleaning up and treating industrial waste *is* expensive. In contrast, reducing through recycling, process modification and other means is much less costly and offers a better alternative for solving the waste problems of many existing industries. New industries should be required to use clean technologies. Joining rewards (tax rebates, low-interest loans, accelerated depreciation, reduced excise taxes, lower customs duties) with punishments (fines, user charges, and intervention) offers the most effective inducement. Collective treatment at industrial estates can contribute to making recycling and treatment economically feasible.

Small industries represent a special problem because they lack the means to control pollution and are difficult to monitor. Indirect instruments such as taxation of inputs and deposit-refund schemes can induce these industries to comply while demonstration projects can show them the feasibility of cleaner alternatives. These measures require better monitoring and analysis of industrial discharges and enforcement. Finally, the location (e.g., spatial clustering) of industry matters. Rigid zoning controls and estate plans in the past have often failed in this regard because they ran counter to market realities. Nonetheless, some

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locational steering to avert serious environmental threats should be possible. Solutions lie in the type of strategic spatial planning for cities discussed earlier, particularly as it affects urban land (see discussion below).

4.3.4 Intracity Transportation

The growth in the sheer number of motorized vehicles in Indonesia represents a great challenge to air pollution control. Introducing cleaner fuels with the necessary technologies offers the greatest promise for short-term reduction of the most dangerous discharges. Spreading reliance on unleaded fuel is particularly important to reduce lead, which causes neurological damage to young children. Road paving is important since road dust is itself a major pollutant. Pricing and inspection and monitoring programs can play a key role in encouraging widespread adoption of better maintenance, thus reducing emissions. Ultimately, slowing vehicular pollution requires control of the growth in total vehicle miles travelled through land-use planning, public transport, and other means.

4.3.5 Urban Land Development and Use

It is now generally recognized in Indonesia that public sector dominated urban land development is prone to failure and that a more promising approach for local governments is to facilitate a market oriented development process. Efforts to improve land titling systems and reform overly restrictive development regulations are important in this regard. Nonetheless, little progress has been made in adopting workable mechanisms to assure that sufficient land will be developed to keep up with urban population growth and that it will be developed at appropriate densities and in an appropriate spatial pattern so as to promote resource conservation and avoid the degradation of environmentally sensitive areas. The key to solutions here probably rests, once again, with the local capital budgeting process since the placement of major roads and water mains are the primary determinants of where land will be opened up for development. Some efforts along these lines can be found in the planning process for JABOTABEK since the early 1980s. Similar themes need to be introduced in other Indonesian cities.

4.3.6 Cross-Cutting Themes: Economic Incentives, Effective Regulation, and Stimulating Environmental Awareness

The paragraphs above discuss proven approaches specific to each of the key substantive elements of UEQM, but there are other important themes for action that warrant emphasis consistent with all of them. First, in all areas, UEQM managers should always be on the look-out for workable economic incentives to enhance environmental quality; e.g., pricing strategies, user charges, and other techniques that "make the polluter pay". Tradeable pollution permits are a good example. These have a number of benefits over regulatory approaches -- principally, they stimulate innovative actions to reduce pollution by thousands of households and other actors in the marketplace without requiring an intensive government presence -- see Annex D.5. Clearly, these economic techniques will not eliminate the need

for regulations, but they should take some of the pressure off regulatory approaches -- important since enforcement capacity is weak. Many existing regulatory systems do need to be streamlined. The keys to effective regulation seem to be (1) keep the rules simple and realistic; and (2) do not bother to put a regulation on the books without a "credible threat of enforcement".

Another activity to be stressed is using a range of techniques to stimulate awareness of the importance of environmental issues and educate all segments of society about their potential role in support of UEQM. The techniques range from mass-media campaigns to building environmental themes into work with community groups and other NGOs related to other programs. Indonesia has a rich network of local organizations and a heritage of community self-help, even in urban areas. This organizational network provides a foundation that can be built on for environmental infrastructure that reaches low-income people. It also provides the framework for collective choice at the community level in prioritizing environmental projects.

There is much evidence that these approaches do change attitudes and, thus, they can make all of the other programmatic approaches discussed here work more easily.

Some economic incentives, regulations, and awareness programs, of course, are most appropriately implemented at the national level. But others will be essential components of local UEQM as emphasized here. Their forcefulness should be much enhanced if they emerge from the type of consensus building process with public and private sector leaders (organized around the annual capital budgeting cycle) that are proposed as the center-piece of UEQM at the local level.

4.4 Building UEQM into Local Investment Programming

4.4.1 Giving Primacy to Local Leadership in UEQM

What are the major instruments available to government to influence environmental outcomes in cities? The most important are the programming of urban infrastructure and services. While related programs are needed as well, it is impossible to imagine effective UEQM that does not entail enhanced water supply, waste disposal and treatment, proper drainage, and the guidance of land development (which is primarily influenced by the placement of major roads and water supply mains). Indonesia has already decided on the most effective institutional means for planning and implementing urban infrastructure: place primary reliance on local government.

With the many failures of public sector attempts to deliver goods and services, there has been a natural tendency of late to shift functions to the private sector where possible. But it is clear, that UEQM as a whole is not something that simply can be left to the workings of the private market to resolve. Because it guides and coordinates the activities of both public and

private institutions, and because there are many externalities to be dealt with, UEQM must begin with what is inherently a public sector decision making process. Furthermore, basic standard setting, monitoring, enforcement and record certification activities are activities that must always remain government-controlled (if not always government-performed).

This being said, however, there are strong reasons to involve the private sector in UEQM and to do so much more actively and positively than has generally been the case in the past. Private sector leaders can participate in the process of planning and standard setting by making recommendations, and they can play an active role as partners in educating the public about a new strategy. Private institutions (firms, NGOs, community groups, households) also can take on a much larger share of the work in implementation. But it must be emphasized that leaders likely to be most effective in these areas (public and private) are local leaders; i.e., those most directly affected by future change in their own communities.

It should be emphasized, probably more than anything else, that operationalizing UEQM means building it into the regular decision making processes of those who plan and implement infrastructure and other elements of urban physical development. Unless this is done, simply establishing a new environmental office in city hall will be a purely symbolic act (possibly a counterproductive one, if it done in a way that perpetuates the "separateness" of environmental issues).

4.4.2 Advantages of UEQM/IUIDP Linkage

Indonesia's decentralized urban development program (as supported under the HG-001 Policy Action Plan) has done much to improve the effectiveness of infrastructure investment programming, predominantly through the approach of the Integrated Urban Infrastructure Development Program (IUIDP). While this program still has many faults (see Tjahati, 1990, Kingsley and Peterson, 1992) it offers important inherent advantages in addressing the issues for UEQM implementation raised above.

The capital budgeting process of IUIDP (PJM preparation) is perhaps the only forum in which many of the key actors are forced to sit together and think about the future development of a specific city in a serious way (budget decisions have to be made). At a minimum, such multi-sectoral capital planning forces coordination. It also enforces financial discipline by including analyses of cost and financing potentials and requiring a prioritizing of projects to fit the plan within real funding constraints.

It seems reasonable that, because of these advantages, local capital planning processes of this type could be incrementally expanded to accomplish a broader range of objectives, explicitly including UEQM. Why not add better analytic support and invite a broader range of actors (e.g., private sector leaders) to participate in the discussions (if not vote on the

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outcomes)?[20]

The context offered as local leaders consider tradeoffs in infrastructure design could have a profound effect in stimulating their interest in other programs needed for UEQM. For example, the best time to gain their support for demand management programs to reduce wasteful use of water may be during PJM preparation, just when they have been confronted with estimates of the full costs of infrastructure to collect and treat all of the wastewater implied by present trends in usage. This context should also stimulate their thinking about community involvement in environmental management as well as roles for the government and private entities in sustainable urban service delivery.

4.4.3 The Next Step: Investment/UEQM Strategies

One of the highest priorities for IUIDP now is to move local officials into a more commanding role in ongoing PJM/RIAP preparation and implementation. In the first rounds of IUIDP, many local officials did work closely with the consultant teams and controlled key decisions, but this was not true in many others. Another problem is that the PJMs generally have suffered from a lack of sufficient analysis and strategic planning and priority setting across sectors before project lists have been compiled. Program staff admit that IUIDP guidelines have been weak in these areas.

The first wave of IUIDP PJM development is virtually complete nationwide, and the time is near to begin the second wave; i.e., adjusting and extending the current programs to better reflect to local priorities while responding to new trends in physical, social, and economic development. It is recommended that at the beginning of the next phase in each city, the front-end process of strategic analysis and planning be expanded along the lines discussed above: (1) to put local leaders fully in control of the most important decisions; and (2) to explicitly add UEQM strategy formulation. The process might work as follows:

1. A central technical assistance/training team would work with local government staff in preparing analyses of the development and environmental challenges faced by a city (and the relationship of the city's current PJM to those challenges). These would include analyses of trends and strategic options related to land development patterns and economic development as well as environmental conditions. Results of surveys of consumer demand would also be incorporated.

2. The Walikota would then call in his top management staff along with a few key private and community leaders for a series of meetings (or retreats).

3. At these meetings, local technical staff (with assistance from the central team) would present their ideas coming out of their analyses; i.e., outlining alternative strategies

[20]Recent legislation in the Philippines has required growing involvement of NGOs and other private sector leaders in the committees that prepare local capital budgets (Kingsley and Mikelsons, 1991).

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for development open to the city and presenting rough estimates of the impacts of each (e.g., infrastructure and land development requirements, costs and potential financing, environmental impacts, impacts on job creation and economic indicators). The estimates would be presented only to stimulate the joint thinking of the local leadership team, not in the manner of hard forecasts.

4. The leadership group would review, discuss, and debate the results of the analysis. The circumstance would force them to consider basic strategic options, and tradeoffs between conflicting objectives, in a realistic manner.

5. They would then make basic policy and program decisions that would set definite guidelines, not only for PJM revisions, but also for revising and adding other programs as needed to achieve environmental, and physical and economic development objectives.

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ANNEX D.3

TECHNICAL ASSISTANCE AND TRAINING REQUIREMENTS

Municipal Finance for Environmental Infrastructure

ANNEX D.3

COMPONENTS OF A TECHNICAL ASSISTANCE AND TRAINING PROGRAM

1. INTRODUCTION

This annex outlines some components of a technical assistance and training program that would be appropriate in support of MFEI.

Consistent with the new priorities discussed for MFEI in this PP, new technical assistance and training initiatives would primarily be focused on: (1) reform of the system of local government finance; (2) the development of urban management guidelines and of an indigenous capacity for education, training and technical assistance in urban management; and (3) urban environmental quality management (UEQM).

2. TA/TRAINING FOR REFORMING THE LOCAL GOVERNMENT FINANCE SYSTEM

2.1 Priorities

Two priorities dominate the technical assistance and training agenda for local government finance. First, strengthening local revenue generation is fundamental to the continued decentralization of infrastructure investment and service-delivery responsibilities. Given the constraints on central government grant financing, local authorities will be able to meet their investment targets only by generating income streams that can help pay for the cost of capital. Moreover, effective pricing of local public services is a pre-requisite to gauging market demand and making market-driven choices about local investment priorities, as it is to providing signals for the most economic use of environmental resources. It is central to the process of community choice in designing a local UEQM program. This element of the technical assistance and training strategy would continue a theme that has figured importantly in MFP technical assistance under HG-001.

Second, technical assistance will be critical in assessing the current strengths and weaknesses of the RDA, developing a five-year plan for RDA's institutional development, and working with both RDA and local governments to improve the procedures used for loan application, project preparation and project appraisal, and debt management.

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A technical assistance plan for municipal finance under MFEI would call for: (a) focus on a few key areas of institutional change, (b) strict sequencing of technical assistance, so that studies of current institutional capacity and practice are performed first, and used to identify follow-up actions that are necessary for system strengthening, (c) use of short-term, specialized technical assistance teams to conduct the initial studies.

Although this annex identifies two separate technical assistance themes for reforming local government finance -- local revenue strengthening, and strengthening of the RDA and the municipal credit system -- the two are, in fact, very closely linked. As argued in Annex D.1, the ultimate constraint on municipal borrowing in Indonesia is the capacity of local governments to repay loans. So long as the opportunities for local revenue generation are as weak as they are at present, local authorities will prudently be reluctant to take on debt, for the very good reason that they have such limited opportunities to raise revenues to make debt payments. In fact, initial studies conducted under MFP indicate that several local water companies may already have over-extended themselves in taking on debt burdens. In the end, the most effective way to strengthen the municipal credit system in Indonesia is likely to be strengthen local revenue-raising ability, so that local governments and the local community can make realistic choices about how much local investment to finance, given its cost in terms of service prices and local taxes.

2.2 Local Revenue Generation

Three important opportunities exist for increasing local revenue generation. First, yields under the property tax can grow rapidly, as long as registration procedures, assessment methods, and billing and collection procedures continue to be upgraded. The Harvard Institute for International Development (HIID) is providing high-quality technical assistance to the GOI in property tax administration, which there is no reason to duplicate. However, technical assistance in financial management should be more closely linked to the HIID technical assistance in property tax administration -- e.g., in projecting probable revenue growth from the property tax in a particular city, given its stage in implementing property tax administrative reforms, so that realistic budget constraints can be used for budgeting purposes.

Second, local revenue growth can be substantially enhanced, and the efficiency of public service delivery increased, by more effective pricing of local public services. In most cases, this will mean more aggressive use of cost-recovery pricing, as well as administrative improvements in billing and collecting for service provision. However, in the case of some environmental services, such as wastewater collection, removal, and treatment, the external benefits are so important that it is undesirable to try to recover the full cost of service delivery from users. Part of the cost should be borne by the central government through grants or by the entire local community through local taxes.

As a first technical assistance priority under this theme, short-term teams would carry out a series of specialized studies on current service pricing practice, billing and collection

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practice, institutional capacity, capital financing needs, and the net surplus or deficit position of local public providers in each of the key environmental service areas: potable water supply; waste water collection, removal, and treatment; and solid waste collection and disposal. These studies would describe and assess current practices, based upon a series of local case studies, recommend practical changes for service and revenue administration, and analyze appropriate changes in pricing policy, in light of the economic and environmental characteristics of the respective services as well as their revenue generating capacity.

Each of these studies also would recommend a sequence of steps for improvement of local revenue generation and system administration within the service area covered. Once these were endorsed by the relevant government authorities, they would become the guidelines for the next stage of technical assistance involving implementation at the local level. This technical assistance in pricing and revenue administration should be carried out in collaboration with the technical assistance in investment planning recommended below.

Thirdly, central government legislation will be needed to give local authorities greater flexibility in deciding which local taxes they will impose, some flexibility in deciding appropriate local tax rates, and potential access to more buoyant revenue sources. Technical assistance in this area would consist of basic information studies--e.g., of the extremely limited revenue raised by various miscellaneous taxes in some regions, where the costs of tax administration exceed revenue collections, or of alternative ways that limited local discretion over tax rates could be introduced, consistent with central government constraints.

2.3 Strengthening RDA and the Municipal Credit System

Annex D.1 proposes a five-step strategy for strengthening the institutional capacity of the RDA through technical assistance and training, and equipping it to serve as an effective transition vehicle to municipal access to private credit markets.

The first step in this process is to conduct an independent evaluation of RDA's current operations, institutional strengths and weaknesses, and relations with local governments. International support for the RDA has been hampered by a good deal of uncertainty as to how it functions in practice, and whether local authorities view it as a readily accessible source of credit responsive to their needs. The limited amount of information on RDA operations that is published makes it impossible to reach an informed judgment about RDA performance from publicly available sources. Given the importance of RDA to the policy agenda, this institutional assessment should be carried out as quickly as feasible. The technical assistance team conducting the study would collaborate with RDA's technical advisors from HIID.

Following completion of the institutional assessment, a five-year plan for development of the RDA would be prepared and agreed to by the Ministry of Finance, BAPPENAS and representatives of local government. Technical assistance can be used to help draft such an agreement. Most critically, a choice must be made by the GOI as to whether RDA is

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intended to develop as a permanent parastatal supply credit to the municipal sector at below market rates of interest, or whether it is intended to be a transitional institution, gradually moving municipal credit supply toward market terms.

The third and fourth steps in the development strategy involve technical assistance in project preparation and project appraisal, and debt management, to the RDA and local authorities, respectively. It is probable that the greatest emphasis should be placed on assistance to local governments. The DDI staff at RDA already has received training in project appraisal from HIID. Local government officials are likely to stand in greater need of these skills at this point. Moreover, in a decentralized system of infrastructure investment and finance, most of the work in project preparation and project appraisal should gradually be shifted to local governments themselves, where the responsibility for investment choice should reside. This stage of technical assistance could be carried out in conjunction with the urban management program described below.

Finally, the technical assistance in financial management would tie together local revenue generation options, described above, and local debt management and financial planning for capital investment. This will require development of guidelines for projecting year-by-year financing obligations under all sources of debt, comparing these with reasonable projections of revenue growth, and adopting prudent standards for coverage of debt payment obligations from unrestricted local funds. This work is central to the development of a stable credit system. At present, local authorities appear to waver between an exaggerated fear of taking on any debt obligations and an unwillingness to face up to the magnitude of annual debt payments already assumed through SLAs and other devices.

3. TA/TRAINING TO DEVELOP URBAN MANAGEMENT GUIDELINES AND AN INDIGENOUS TECHNICAL ASSISTANCE AND TRAINING CAPACITY

There are two sub-components in this work: developing urban management regulations and guidelines; and developing an indigenous education, training and technical assistance capacity in urban management. Considerable planning (and other preparatory work) for each has already been accomplished in the MFP project. New resources provided here would be devoted to extending and implementing these plans.

3.1 Urban Management Regulations and Guidelines

The MFP has already initiated a comprehensive inventory and assessment of all regulations concerning urban management (including finance). The next phase of this work is intended to involve reviewing the results of this inventory, and then: (1) formulating a unified code of regulation (and specification of gaps in existing laws and regulations); (2) issuance of guidelines to help implement the regulations; (3) development of a system for coordinating the issuance of new regulations; and (4) training local government officials in the regulatory code.

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3.2 Indigenous Technical Assistance and Training in Urban Management

A collaborative effort by the advisory teams of the MFP and the IUIDP Implementation Support Project has prepared an inventory of all training programs currently available for local officials and used that as a basis for discussions with all of the agencies participating in the IMG. Agency counterparts recognized that present training options are highly fragmented with substantial gaps as well as overlaps. There was general agreement that the absolute level of technical assistance and training for local governments needed to be substantially increased, that a coordinated approach will be required, and that it should focus on building indigenous capacity in urban management.

The present design calls for something in between large scale restructuring (that would require markedly greater centralized coordination) and an incremental approach that would only modestly adjust existing programs. It emphasizes targeted strengthening of parts of the current system along with selected program coordination. Suggested principles state that the system: should address both structural and content deficiencies; should target all relevant actors (central as well as local) while being focused on management of urban local government services consistent with the national policy of decentralization; should be "demand driven" and responsive to the job needs of local managers; should be paid for in large part by local governments; should merge the concepts of technical assistance and training; and should be consciously experimental.

The design for a new training program in urban management calls for "Tier 1 courses" which would offer materials on strategic management for Tk.II top management teams (assessing conditions and potentials of their cities, setting priorities, allocating resources, organizing and motivating staff, and monitoring results). "Tier 2 courses" would be aimed at lower level professional staff, and would focus more on "how to do it". There would be both Tier 1 and Tier 2 courses in four substantive areas: (1) financial management, (2) infrastructure capital investment planning; (3) service delivery management; and (4) spatial planning and land management.

TA/training resources could be applied to extend the design of this system and implement it. This would include: (1) preparing an institutional development plan; (2) curriculum development; (3) training of trainers; (4) establishing training sites in selected location; and (5) assistance in managing the overall program.

3.3 Strengthening Education for Urban Planning and Management

Whereas training programs for local officials address short-term requirements, there is a corresponding need for development and expansion of formal education courses, at undergraduate and graduate level, in urban planning and management. Presently, the premier courses are given by the Bandung Institute of Technology (ITB), which is the longest-established institution in Indonesia offering education in urban development. However, several regional universities have recently started to offer courses in urban

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planning and management, or to plan to mount such courses, often specializing in particular fields.

Despite this expansion of interest in providing planning education -- confirmed by considerable demand for places at these universities -- the supply of planning graduates will continue to fall far short of the need for the foreseeable future. Graduates from schools of urban planning and management will be needed by central and local government, consulting firms and the media, NGOs and other organizations involved in urban development. At the same time, the curricula at these universities may not appropriately reflect current needs, and deserves a fresh review to determine whether and how they should be updated.

TA/training resources would focus on these issues, including the integration of systems for training and education; the development of appropriate curricula for Indonesia; the identification of institutions for expansion and development of courses on planning and management; the relationship of the various universities with each other, with other training institutions and with overseas institutes; and would give assistance in managing the overall program of university strengthening.

4. TA/TRAINING FOR URBAN ENVIRONMENTAL QUALITY MANAGEMENT

TA/training resources could appropriately be focused on what has been suggested as the primary environmental objective under the Policy Action Plan: the development of local UEQM strategies linked to IUIDP. (The principles of UEQM as described in Annex D.2.) Four work components would be required: (1) developing a program of urban environmental monitoring; (2) designing an approach to UEQM analysis and strategy formulation; (3) trying out the approach, working with local leadership to develop UEQM strategies in several cities; (4) building lessons from this experience into the broader plan for developing indigenous technical assistance and training capacity in urban management.

4.1 Environmental Monitoring

Developing hard facts on past changes in local environmental quality (and using them to predict future quality levels under alternative development scenarios) will be essential to motivating local leadership to take UEQM planning seriously. Attempts are often made to define ideal monitoring systems and data bases, but few such ambitious projects are actually implemented. It may make more sense to define a limited set of indicators at the start for a few cities and then assure that the capacity is provided so that measurements will be taken to update them on a regular basis. Additional, and more refined, indicators can be added later, and the program can be expanded to additional cities, as capacity growth permits.

GOI and local officials are developing a fairly complete monitoring program for Jakarta with support from the World Bank MEIP program (see Annex D.2). This approach could be modified to provide a model for efforts in other cities (mid-sized cities in the 100,000 to one

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million population range would probably be the most appropriate group of candidates). Given economies of scale, it is likely that environmental monitoring should be performed by a central or provincial level agency rather than by each locality on its own. It would be imperative, however, to assure that resulting data are rapidly and automatically provided to local governments for use in their strategic planning processes.

4.2 Designing an Approach to UEQM Analysis and Strategy Formulation

Over the past decade, a number of technical studies have yielded appropriate methods that could be used in local UEQM analysis and strategy formulation. For example, these include methods for: (1) environmental risk analysis (determining comparative priorities among environmental problems); (2) analyzing the environmental effects of alternative investment/development plans for urban areas; (3) tracking and projecting service levels implied by such plans; and (4) combined comparative evaluation of environmental, cost, land use, economic development and other impacts of such plans.

Technical assistance in this area would be devoted to adapting available methodologies for use in this type of analysis and strategy formulation for Indonesian cities. The work would entail the preparation of guidelines, computer software and example analyses (in Bahasa Indonesia).

This work would emphasize simplification. There is often a tendency to make research and analysis like this much too complex and time consuming. If it moves too slowly, there is the danger that, at best, it will be regarded only as an academic exercise -- or, at worst, that it will never be completed. It is extremely important that these tendencies for over-elaboration be avoided in the real analytic frameworks for UEQM in Indonesia. The basic data collection and strategic planning required for UEQM can be done in a short period of time if a simple (understandable) framework is established. It will not be perfect the first time (many data, and perhaps conceptual, gaps will remain) -- but the process can be improved incrementally as it is repeated in the future. Perhaps the best way to stop it from becoming too elaborate in any city would be to set a definite time limit for UEQM strategic analysis and planning (say, three to six months from start to completion).

4.3 Demonstration Projects: Working with Selected Cities to Develop UEQM Strategies

Given the development of the approach and methodology described above, the next step would be to apply it in demonstration projects in selected cities. Again, it would be appropriate to select cities in the mid-sized range for this purpose (100,000 to one million population).

The technical assistance team that would work with local governments in these efforts would have to include some expatriate specialists, but the teams would be led by Indonesians of two types: (1) central or provincial government staff who have received special training in the

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type of strategy formulation proposed; and (2) other specialists who will be responsible for developing and participating in the process of longer term technical assistance and training for local governments in UEQM (see discussion above).

After the candidate cities have been selected, and terms of reference negotiated with the mayors, the process would proceed in each city as follows: (1) the technical assistance team would work with local government staff in preparing analyses of the development and environmental challenges faced by a city (and the relationship of the city's current PJM to those challenges) using the guidelines developed above; (2) the mayor would then call in his top management staff along with a few key private and community leaders for a series of meetings (or retreats); (3) at these meetings, local technical staff (with assistance from the TA team) would present their ideas coming out of their analyses: i.e., outlining alternative strategies for development open to the city and presenting rough estimates of the impacts of each (e.g., infrastructure and land development requirements, costs and potential financing, environmental impacts, impacts on job creation and economic indicators). The estimates would be presented only to stimulate the joint thinking of the local leadership team, not in the manner of hard forecasts. And (4), in this context, the local leadership team would be forced to consider basic strategic choices in a realistic manner. The initial retreats might lead to other meetings, to policy decisions and guidelines after that, and finally to modifications to improve current PJMs.

4.4 Indigenous Technical Assistance and Training Capacity

The concept of developing forceful UEQM strategies and programs for all of Indonesia's mid- and large-size cities, and regularly updating and strengthening them, would be infeasible if it depended even primarily on external donor assistance. The only way to further the concept would be to build capacity in Indonesian institutions so they can operate training programs for, and provide technical assistance to, local leaders and staff in UEQM over the long term. Thus, environmental themes would be incorporated in most of the modules of the urban management training program described above, but the greatest emphasis would be placed on modifying the proposed module on spatial planning and land management. The materials that would serve as the basis for curriculum design would already have been provided in the work discussed above (i.e., guidelines for environmental monitoring, analysis, and strategy formulation, plus case studies of the demonstration project experiences).

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ANNEX D.4

ECONOMIC ANALYSES

1. INTRODUCTION

2. THE DEMAND FOR ENVIRONMENTAL INFRASTRUCTURE
   2.1 The Current Situation
   2.2 The GOI's Investment Program

3. ECONOMIC RATIONALE FOR ENVIRONMENTAL INFRASTRUCTURE
   3.1 The Shortcomings of Traditional Economic Analyses
   3.2 The Role of Economic Infrastructure in Economic Growth
   3.3 Environmental Degradation
   3.4 Environmental Health

4. PRICING AND COST RECOVERY
   4.1 Pricing Issues
   4.2 Cost Recovery Issues

5. ECONOMIC INSTRUMENTS FOR ENVIRONMENTAL MANAGEMENT
   5.1 Current Theory and Practice
   5.2 Application to Indonesia
   5.3 Economic Tools for Demand-Driven Planning

REFERENCES

ANNEX D.4

ECONOMIC ANALYSIS

1. INTRODUCTION

The economic analysis finds that the Municipal Finance for Environmental Infrastructure (MFEI) program will provide substantial direct and indirect economic benefits both from support of policy change, and through the direct investment of resources in urban environmental infrastructure. The MFEI program supports the Government of Indonesia's policy agenda to stimulate higher levels of investment in urban services; improve cost recovery, debt management, and more efficient use of resources by local governments and enterprises; and establish sustainable credit mechanisms whose capital base will ultimately be augmented from private financial markets. The program will also have direct economic benefits resulting from GOI expenditures on infrastructure (consisting of the local currency equivalent of $125 million in water supply, KIP expenditures, environmental sanitation and drainage, and flood protection) under the program's Investment Plan.

Section 2 of this annex examines how HG-eligible environmental infrastructure investments in water supply, wastewater treatment, solid waste disposal, drainage and flood control, and the Kampung Improvement Program fit into the GOI's development plans.

Next, Section 3 provides a rough estimate of the quantifiable economic benefits of the program and reviews the economic arguments for the program's support of investment in urban environmental infrastructure. The analysis of economic benefits concludes that the returns far exceed the opportunity cost of the credit subsidy appropriation. The economic arguments for the program reviewed include the following: (1) that the lack of appropriate infrastructure constrains the pace and spread of economic growth by creating production and distribution bottlenecks; (2) that the lack of timely environmental infrastructure investment leads directly to environmental degradation that cannot be mitigated, and highly discounts future benefits in favor of current consumption; and (3) that inadequate infrastructure has very significant negative impacts on environmental health and social welfare that are often disproportionately biassed towards lower income groups.

Section 4 looks at infrastructure pricing policy in the light of policy instruments to support the GOI's environmental agenda. Finally, Section 5 briefly reviews some economic and regulatory instruments available in establishing environmental policy and gives outline policy measures proposed for Indonesia. It also discusses economic tools available in support of a market-driven approach to the establishment of levels of service for urban infrastructure.

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2. THE DEMAND FOR ENVIRONMENTAL INFRASTRUCTURE

2.1 The Current Situation

Considerable progress has been achieved in meeting infrastructure requirements in Indonesia over the last twenty years. For example, the length of paved roads increased from 20,000 km in 1970 to over 100,000 km in 1990. Over this 20 year period, the installed capacity of the state electricity company has grown eighteen times. The capacity of public piped water schemes was also increased nearly three times in this same time frame (1).

While impressive progress was achieved in the 1970s and 1980s. the vigorous pace of economic growth expected in the 1990s will demand further considerable increases in infrastructure investment. At present, as documented in Annex D.2, Indonesia lags behind in a number of critical infrastructure areas. For instance, only about 36 percent of households are on municipal piped water systems; estimates for commercial operations are much lower, at about 12 percent. The vast majority of residents of Indonesia's cities use on-site sanitation, which becomes unmanageable beyond certain densities. Collection and treatment of waste water is almost non-existent. Drainage facilities and solid waste management are also considered to be inadequate. (1,6,7,11)

The current situation of unmet demand for urban environmental infrastructure will be exacerbated by the continued increase in urbanization and increasing incomes. Meeting these demands, however, seems to be less than adequate. For example the continued use of unregulated groundwater to meet water demands will result in aquifer depletion (1,7). Persistent use of on-site sanitation systems when municipal systems may provide economic gains through economies of scale and environmental benefits also appear economically unjustified. These short-term solutions are unlikely to be sustainable, and it is clear that large investments are needed in environmental infrastructure as well as improvements in the efficiency of service delivery.

2.2 The GOI's Investment Program

Both the World Bank and BAPPENAS recognize that investment levels are falling behind targets for infrastructure investment. It is also recognized that, in its five-year development plans, the GOI has afforded a high priority to infrastructure, raising its share in total public investment from 43 percent in Repelita IV to 53 percent in Repelita V. This represents an increase from about 3 percent of GDP to 6.5 percent of GDP, respectively. (4)

Investments in environmental infrastructure are reported in terms of public investment in water supply, sanitation, drainage and flood protection, and in the Kampung Improvement Program. Investments in the subsector, measured as a percentage of GDP, are not expected to increase from Repelita V to Repelita VI, remaining at about 0.7 percent of GDP. Although the absolute percentage devoted to water supply and sanitation infrastructure has not changed, the emphasis between subsectors is expected to change. Table 1 indicates that,

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although expenditures on KIP would increase slightly and water supply investment decrease slightly, expenditures on environmental sanitation and drainage are expected to increase considerably, at the expense of flood protection.(4)

An increased emphasis on investments dealing with sanitation issues would reflect a greater emphasis on mitigating the negative externalities associated with poor and inadequate sanitation. These include issues of water quality and quantity, environmental degradation and public health.

Table 1

Indicative Investment Program for Water Supply and Sanitation
REPELITA V and REPELITA VI, percentage allocation

	Repelita V	Repelita VI
Sub-Sectors	percentage	percentage
Kampung Improvement Program - KIP	9%	10%
Water Supply	44%	42%
Environmental Sanitation & Drainage	9%	21%
Flood Protection	38%	27%
TOTAL	100%	100%

Source: Consultants estimates, (4)

3. ECONOMIC ARGUMENTS FOR INVESTING IN ENVIRONMENTAL INFRASTRUCTURE

3.1 Estimate of Quantifiable Benefits

The program will provide substantial direct and indirect economic benefits far in excess of the costs of the HG loans both from support of policy change, and through the direct investment of resources in urban environmental infrastructure. The most significant economic benefits of the program will be achieved through support of the GOI Policy Action Plan. The long-term impact of policy change will be to stimulate higher levels of investment in urban services; improve cost recovery, debt management, and more efficient use of resources by local governments and enterprises; and establish sustainable credit mechanisms whose capital base will ultimately be augmented from private financial markets.

The program will also have direct economic benefits resulting from GOI expenditures on infrastructure (consisting of the local currency equivalent of $125 million in water supply,

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KIP expenditures, environmental sanitation and drainage, and flood protection) under the HG loan Local Currency Investment Program. In addition, the program will have indirect economic benefits resulting from increased health and productivity among households, enhanced efficiency and competitiveness of private firms, and long-term cost savings due to environmental preservation or retarded depletion of non-renewable natural resources, especially groundwater aquifers.

The costs of the loan guarantees will amount to $16,156,250 in credit subsidy appropriations (12.925% of $125 million in loan guarantees, given the country debt risk rating for Indonesia). The opportunity cost of capital in Indonesia is estimated at between 10 to 15 percent. Although it is difficult to quantify the economic benefits resulting from a program such as this, the economic benefits are estimated to far exceed the opportunity cost of the credit subsidy appropriations due to the following:

1) Local Currency Investment Program: returns on urban infrastructure investments to be made by the GOI, in amounts equivalent to the $125 million in loan guarantees, are estimated to range between 10 and 15 percent;

2) Policy Action Plan: anticipated benefits associated with selected policy reform initiatives suggest a magnitude of order of impacts of the overall Policy Action Plan of several hundred million dollars, in addition to the direct impacts of infrastructure construction; and,

3) Other Benefits: additional benefits, such as gains in health and productivity and improved environmental preservation and management, will also accrue, further contributing to program's economic rate of return.

The most readily quantifiable economic benefits of the program are returns on investment in urban infrastructure made by the GOI under the Local Currency Investment Program. The first section of this analysis reviews World Bank methodology and criteria for determining the economic benefits of infrastructure investments, to provide an indication of the returns of such GOI direct investments. The economic rate of return (ERR) of these expenditures is estimated by the World Bank to range form 10 to 15 percent for water supply subprojects, and over 25 percent for road improvements. Data on the real net increase in land values due infrastructure installation is also presented to provide additional proxy indicators of the economic benefit of direct investment in urban infrastructure.

The next section of this analysis examines two examples of potential benefits of policy reform to illustrate the magnitude of benefits associated with the overall Policy Action Plan. The last section lists additional, other benefits which further contribute to program's economic rate of return.

3.1.1 Investment Program Economic Benefits

Recent World Bank urban infrastructure program loans, such as the East Java-Bali Urban Development Project (EJBUDP) and the Sulawesi-Irian Jaya Urban Development Project (SIJUDP), are similar to MFEI in that the funds are to be used for several different urban subsectors in a variety of municipalities throughout Indonesia. Rather than calculating the economic return to the entire program, the World Bank and the GOI have developed a somewhat simplified and streamlined approach to evaluate specific subproject proposals to be financed under EJBUDP and SIJUDP. Subprojects are first classified according to investment costs, as follows: small (less than Rp 400 million in constant 1989 prices); medium (Rp 400 million to Rp 4 billion); and, large (greater than Rp 4 billion). The economic viability of small subprojects is presumed, as long as they adhere to agreed planning and design criteria (see below). Medium-size subprojects are subject to a simplified economic analysis, performed locally. Large subprojects have to go through a detailed standard Bank analysis, and are reviewed on case by case basis.

Economic rate of return (ERR) or net present value (NPV) calculations are required for medium and large subprojects in the water supply, road, and drainage subsectors. Although an ERR of 10 percent is used as the minimum cut-off rate, most water supply subprojects have had an estimated ERR of between 10 and 15 percent, and several road subprojects have had an estimated ERR of 25 percent or more. Quantification of economic benefits is based on:

Water Supply:	consumers' willingness to pay supply;
Road improvements:	expected savings in vehicle operation costs and time savings;
Drainage improvements:	either avoided flood damage or increase in land values plus reduction in the expected level of road maintenance costs.

The economic benefits of human and solid waste management and kampung improvement subprojects are not quantified. According to the *EJBUDP Staff Appraisal Report*:

> Both the human and solid waste management subprojects represent least cost solutions to the problems of providing a basic level of service that is adapted to local needs and traditions. Economic viability of similar kampung improvement was demonstrated under a series of World Bank assisted projects in Indonesia, including Loans 1972-IND in Bali and 2408-IND in East Java.

The World Bank has used the above-noted methodology and criteria for determining the economic benefits of investments in urban infrastructure not only in Indonesia; the World Bank has applied this approach to sector-based lending throughout Central and South America.

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An additional proxy measure of the economic benefits of intersectoral infrastructure investments is changes in land values. Several recent studies have demonstrated a significant real net increase in land values due to infrastructure construction or upgrading. For example, according to an internal GOI report completed in 1991 by Robert Cervero, *Benefit Assessment Financing of Infrastructure in Indonesia*, road improvements alone have led to the following increases in Indonesian land values (in 1990 rupiah prices):

- for farm land, values increased between Rp 9,000 to Rp 12,000 per m^2;
- for residential land within DKI Jakarta, values increased between Rp 20,000 (in the suburbs) to Rp 100,000 (downtown) per m^2; and
- in the Botabek region, the land value premium associated with access to major roads ranged between Rp 10,000 to Rp 115,000 per m^2 for residential plots, Rp 45,000 to Rp 150,000 per m^2 for commercial plots, and Rp 10,000 to Rp 55,000 per m^2 for industrial plots.

For integrated infrastructure schemes, Cervero gave the following examples:

- North Denpasar (Bali) Program - Adjusting for inflation and regional trends, it is estimated that land values rose by 32 percent in real terms, or by about Rp 12,000 per m^2 in 1990 rupiahs.
- Gianyar (Bali) Program - Again adjusting for inflation and regional trends, it is estimated that land values rose by 83 percent in real terms, or by about Rp 9,250 per m^2 in 1990 rupiahs.

For comparison, the results of a recent land price model estimated for DKI Jakarta by Professor David Dowall in *The Price of Land for Housing in Jakarta: An Analysis of the Effects of Location, Urban Infrastructure, and Tenure on Residential Plot Prices* were as follows, using data on average land value changes for 128 kelurahans in Jakarta between 1987 and 1989:

- the average per-square-meter benefit of providing infrastructure over this period was Rp 57,400;
- given an average plot size of 120 square meters, this amounts to a benefit of approximately Rp 6.9 million per residential site; and
- this amount likely exceeds the actual per plot cost of roads and other infrastructure, suggesting that a full cost recovery infrastructure finance program could be supported.

Finally, for international comparisons, various studies published by USAID Office of Housing and Urban Programs have noted the following:

- the price of serviced land in Bangkok increased at an annual real rate of almost twice that of unserviced land from 1988 to 1990;

- in Santa Cruz, Bolivia, land with access to piped water, paved streets, flooding protection, and rudimentary wastewater removal sells at 10 to 15 times the price of comparably located land without these services; and

- the typical upgrading project in developing countries earned a rate of return of between 20 and 30 percent.

3.1.2 Economic Benefits of Policy Reform

Two examples of the possible financial impact of policy reform that may be readily quantifiable are the increased financial viability of local water enterprises (PDAMs), and increased tax revenue from the property tax. Regarding PDAMs, in a recent sample of 14 PDAMs by MFP team, 8 of the PDAMs lost a total of Rp 5.8 billion in 1990. If policy reform regarding rate setting, debt service ratios, and technical assistance to PDAMs is successful, one would expect these PDAMs to become income generators. As this survey included some of the healthiest PDAMs, one would also expect the results to be even more dramatic for the other 300 plus PDAMs and pre-PDAMs (BPAMs) located throughout Indonesia. If one-third of the total of these 300 PDAM/BPAMs were to have at least comparable reductions in losses, for example, the magnitude of benefit would amount to roughly $30-40 million.

Regarding the property tax, revenue from rural and urban properties increased at a compounded annual rate of almost 20 percent in nominal terms and nearly 5 percent in constant (1985) rupiahs over the past two decades, rising from Rp 7 billion in 1970 to Rp 286 billion in 1991. Moreover, since the 1986 property tax reform, property tax receipts have more than tripled in nominal terms and increased 139 percent in constant (1985) rupiahs (including the "P3" sectors of plantations, forests, and mines). Total property tax receipts during Indonesian fiscal year 1992 were just under Rp 1 trillion. One would again hope that continued policy reform will facilitate even greater property tax revenues, as well as designate a larger share for local governments.

3.1.3 Other Benefits

Often overlooked and extremely difficult to quantify in determining the economic benefits of environmental infrastructure projects are the following:

- Reduced health care expenses and increased worker productivity due to better urban sanitation, especially regarding water supply, human waste disposal, and solid waste disposal.

- Net increase in GDP due to a healthier and more productive work force.

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- Preservation or retarded depletion of non-renewable natural resources, especially water, due to the development and economic pricing of urban infrastructure and services.

- Increased efficiency and effectiveness of urban-based industries and services due to the improvement of supporting urban infrastructure and services, especially roads, ports, power, and communications.

- Increased effective demand for urban infrastructure and services, and thus greater financial viability of such capital investments, due to decentralized planning and management of such projects.

- Decreased foreign borrowing due to the development of a sustainable credit system for financing local investments in urban infrastructure and services, as well as the utilization of previously untapped local revenue sources and private sector capital.

- Increased efficiency and competitiveness due to the development of more capable urban managers and municipal technical staffs.

Thus, the economic benefits of the Municipal Finance for Environmental Infrastructure (MFEI) are estimated to far exceed the opportunity cost of the credit subsidy appropriation for the HG loans. The economic benefits of the Investment Plan aspect of the MFEI program alone, estimated conservatively to have a ERR ranging from 10 to 15 percent, enables the program as a whole to roughly approximate the opportunity cost of capital in Indonesia. If the substantial long-term benefits of policy change are next added to the calculation of benefits, the overall ERR for the MFEI program may be seen to more than double. If nonquantifiable benefits could also be added to the calculation, the overall ERR would be further increased.

3.2 The Role of Economic Infrastructure in Economic Growth

Environmental infrastructure plays a fundamental role in economic growth. Indonesia is looking to non-oil and non-traditional exports, particularly the manufacturing sector, to act as its "engine" of growth. An adequate supply of efficient infrastructure promotes the production and distribution of goods by lowering industrial and commercial production costs. This can have important ramifications on a firm's competitiveness and productivity. Without adequate development of such infrastructure, serious bottlenecks in production can emerge and diminish growth and employment. There are, for example, cases where several industries decided not to locate in Surabaya because of the lack of an adequate and suitable water supply. (7)

A number of studies have given ample evidence that the lack of adequate infrastructure is a major constraint to industrial growth and to the diversification and the spread of industrial development to other regions within a country. (2,3) Empirical evidence from several

countries documents how deficiencies in public infrastructure impose substantial costs on individual industries. In Indonesia, for instance, the lack of adequate municipal supplies of water forces industries and commercial enterprises to use groundwater sources. Firms have to meet the capital, operating and maintenance costs of these sources, and, in a majority of cases they are also charged for groundwater use. It is likely that industrial and commercial consumers would be better served from municipal systems that would capture economies of scale.

3.3 Environmental Degradation

Environmental degradation of water resources through inadequate provision of wastewater facilities leads to a decline in water quality and, therefore, in the quantity of potable water. Current practices of groundwater mining in certain areas of Indonesia (particularly Jakarta) and groundwater "sacrifice" due to the large volumes of human sewage and other black water that enters the groundwater, contribute to its degradation. (1,6) Further, the lack of adequate sewerage and solid waste disposal continue to pollute surface water. At present, biological oxygen demand (BOD) exceeds conventional standards in many rivers flowing through major cities. Heavy metals contamination in certain areas (the Bandung-Jakarta corridor) make full treatment of water impossible, and may result in permanent degradation. (1)

Due to a lack of investment in municipal piped water in a number of urban areas in Indonesia, excessive groundwater extraction has led to permanent environmental damage such as saline intrusion, land subsidence and depletion of aquifers. These damages extend to building foundations, flooding and loss of access to potable water, with subsequent health and social welfare losses. (1,4)

A significant reason for the continued deterioration of the water resources in Indonesia is an inability to internalize full externality costs -- both positive and negative -- in the price of water or other environmentally linked urban services. Incorrect price signals send inappropriate investment and consumption messages. It is a classic case of heavily discounting future benefits in terms of current consumption. (13)

3.4 Environmental Health

Improved public health and social welfare remain major reasons for investment in urban environmental infrastructure. A review of health benefits of access to potable water (14) revealed that the negative health consequences of inadequate drinking water and of poor handling of wastewater fall disproportionately on the poor. For example the lack of proper sewage disposal facilities has been associated with outbreaks of serious, often fatal, illnesses, especially for the poorer segments of the population in Jakarta. (1)

High rates of diarrheal and other water-borne diseases reduce life expectancy, cause loss of work opportunities, increase family care burdens, and cause productivity losses among workers. The severity of diarrhea, in terms of days reported ill, appears to be higher among

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the urban than the rural poor. Overall, diarrhea is the third biggest cause of infant mortality in Indonesia, causing about 16 percent of deaths. (6)

The inability to monetize externalities like health benefits within cost benefit analysis, and to make explicit the pollution-health relationship, clearly underestimates the full impact of environmental infrastructure improvements and of their impacts on environmental health.

4. PRICING AND COST RECOVERY

Pricing is a powerful tool used by the economy for efficient resource use. Other regulatory and economic instruments used in policy choices are discussed in Section 5. In this section, economic pricing as well as cost recovery issues are discussed.

4.1 Pricing Issues

4.1.1 Public and Private Goods

Urban environmental infrastructure is widely considered to be in the domain of the public sector. With the exception of piped water supply, the collection and treatment of municipal waste water, solid waste disposal (landfills, etc) and urban access roads all exhibit the properties of public goods. That is, there is an inherent difficulty in charging individual users for these services and in excluding non-payers (the "free rider" problem) and non-users from these services. Groundwater resources, when available without enforced restriction, as appears to be the case in Indonesia, are also classic "open access" goods, i.e. goods which people cannot be excluded from using.

Piped water supplies can be considered as private goods that can be "owned" and used by consumers. Benefits can be retained by the individual. The classic ownership principle is demonstrated for water when populations served with public taps change their level of service and have access to individual household connections.

With the exception of solid waste collection and certain technologies for on-site sanitation, the majority of environmental infrastructure goods exhibit the characteristics of "natural monopolies" with increasing returns to large economies of scale. Public infrastructure is often built to capture lower unit costs through larger capacity than is needed in the immediate future. Over-capacity is often inherent in infrastructure design and is usually paid for at public cost. Systems are not built for today's demand but for future demand. Natural monopolies, by their very nature, expand at decreasing unit costs, so excluding competition from regulating the market.

It can be argued that the economic role of governments is to correct market failures by funding public goods that generate positive externalities. (10) Governments must also

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oversee appropriate prices for infrastructure services that are provided by public monopolies or public companies in the absence of effective competition.

4.1.2 Economic Prices

Economic pricing for infrastructure services involves more than simple cost recovery. Economic pricing should lead to correct allocation decisions. Prices of services influence the use of services, i.e. low prices send the wrong message in terms of "value" and may lead to over-use. Further, price levels affect capacity utilization of existing facilities, as well as influencing investment decisions.

Theory dictates that efficiency prices should be set equal to the cost of providing an additional unit of service at the margin. Prices set over or under marginal costs lead to an inefficient use of resources and send the wrong signals to consumers. For urban infrastructure, long-run marginal costs are used because of the "lumpy" nature of the investments and the lack of modular units -- except perhaps for solid waste collection and on-site sanitation services. For most urban services, conventional utility pricing would set tariffs to cover operating and maintenance costs, interest payments and depreciation. These rates should also provide for retained earnings to finance part of the investment program.

For water services, the full cost of production should reflect its opportunity cost, or next best use, as well as the conventional costs of production and capital. Adding the opportunity cost of water to its marginal cost of supply, and comparing this with its current price indicates how efficient water pricing is and what is the optimum level. Ignoring the full cost of water will undervalue the resource, lead to failures to invest, and cause serious misallocation of the resource between users.

This is exactly the situation in which "free" groundwater supplies up to 50 percent of the fresh water to Jakarta. Though users pay production and operational costs of water use (mainly the electricity costs of pumping), the opportunity cost or externality costs of aquifer depletion are ignored. It is unlikely that the aquifer under Jakarta will ever recover through natural recharge. Future water costs may go up dramatically, as new and more difficult and inconvenient sources of water need to be exploited.

This classic case of environmental degradation of groundwater is caused by the failure of producers and consumers to internalize environmental costs, so that these are not reflected in the price of the resource. Ground-water tariffs, even when they do exist, are set well below piped water rates. This exacerbates the use of groundwater by sending exactly the wrong price signals to users. It is estimated that 75 percent of the groundwater drilling and extraction are done outside the official licensing fee system. User charges would go some way to ensure the more efficient use of resources. (1)

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4.2 Cost Recovery Issues

4.2.1 Full Cost Recovery and Social Objectives

The GOI has established policies that users should pay the full financial cost of some urban services. Piped water supply is one service that is considered appropriate for full cost recovery through user charges. Solid waste services and waste water collection and treatment are expected to be subsidized through direct government transfers and interest rate subsidies.

It is common to price environmental urban services below full cost recovery to promote income distribution objectives. This is a traditional way of targeting low income groups for a variety of services that are necessary for basic human needs. For electricity and water services, for instance, lifeline "block" tariffs are established that give adequate but minimal services at a very low cost. Use of public taps is often free of charge and considered as a "lifeline" intervention. In principle, the use of subsidies in this way promotes general economic development and welfare. Unfortunately, experience in a number of cities in Indonesia shows that subsidies miss the low-income target groups that they are intended to benefit. Often these groups do not have access to piped water. Subsidies through lower tariffs often support middle-income groups, who could well afford services charged at full cost. (1)

4.2.2 Urban Water Supplies

The PDAMs, the semi-autonomous local water authorities, provide most of the public piped water in Indonesia. They are mandated to set tariffs that cover depreciation, interest and operation and maintenance expenses, and to approach full cost recovery. Currently, however, most water delivery through the PDAMs is not priced to achieve full cost pricing in terms of recovery of investment costs. Tariff rates have been set to cover at least operation and maintenance costs, but debt service often remains unfunded at municipal level.

At the present time, tariffs to residential customers are subsidized by commercial and industrial users who pay two to three times the average tariff paid by domestic users. (6,7) It is clear that subsidies are provided to many consumers who seem well able to afford to pay closer to the marginal cost of production. The pricing structure, while intending to provide water to all users at a lower cost, results in over-consumption of piped water by households and under-consumption of piped water by non-domestic users. Disproportionately high fees for industrial and commercial consumers have driven a number of these consumers to develop their own groundwater supplies. (1,6) Though these users have developed their own facilities at some cost, fees for groundwater extraction are very low and, given present tariffs, they are not inclined to transfer to piped water even if it is available. At present, there appear to be no moves to adjust groundwater charges to reflect the real resource cost of possible aquifer depletion.

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The perceived level of service from urban piped water supply is not high. Water quality is considered low, and all piped water supplies, and supplies from wells, are generally boiled before drinking. (1) In fact, quality is thought to be so poor that many domestic and non-domestic users who have access to the system prefer to use groundwater sources, particularly as use of groundwater has relatively low costs and is more reliable. Poor service is reflected to some extent by the inability of the water companies to reduce the percentage of unaccounted-for water or non-revenue water. Unaccounted-for water typically exceeds 40 percent of supply in most Indonesian cities, compared with less than 10 percent in Singapore. High tariffs are needed to pay for these losses. (7)

4.2.3 Solid Waste and Wastewater Treatment

Information on cost recovery from solid waste and wastewater treatment is not as fully reported as for water supply.

Most information on cost recovery of solid waste collection relates to the operations of the municipal cleansing agencies, Dinas Kebersihan. As in a majority of the water supply companies, "cost recovery" in the solid waste management sector normally refers only to recoupment of operations and maintenance costs, not to depreciation on capital equipment or debt service. Waste produced by shops, markets, hotels and factories, e.g. commercial waste, generates much more substantial revenue than from households. Revenues from these commercial enterprises, and especially markets, are used to cross-subsidize the handling of domestic waste. Available information indicates that the failure to generate revenue from household collections of waste results in heavy financial losses by the Dinas Kebersihan each year. With respect only to operation and maintenance costs of collection, and operation of landfills and transfer stations, average cost recovery in cities with a population over 100,000 is only 28 percent. Full cost recovery probably is as low as 5 to 10 percent of total real costs.

The wastewater treatment sector in Indonesia is very underdeveloped. It is estimated that currently below 5 percent of urban residents are served by operating sewer systems. About 35 to 40 percent of urban residents have access to improved sanitation. Service is mainly with septic tanks that are provided with drainage fields or with a leaching pit.

As for water supply, sewerage tariffs are calculated to recover only the operation and maintenance costs of sewer services and do not include original capital costs or capital replacement. Explicit cross-subsidies have been included in the official tariff schedule; revenues from commercial customers, especially large commercial buildings and hotels, are used to subsidize rates for residential customers. In almost all countries, as a rule, capital investment in sewage treatment facilities has been supported through public investment; user fees for sewerage services are only recently being set to provide for full cost recovery, and then in only a few countries such as the U.S. and the U.K.

5. ECONOMIC INSTRUMENTS FOR ENVIRONMENTAL MANAGEMENT

This section gives a brief overview of the principal policy instruments for pollution control and waste management for urban services used in a variety of countries. (7) It looks briefly at the recent work prepared for BAPEDAL that incorporates a number of these strategies, relying heavily on recent work by Dr. Glen Anderson. (8) It concludes by reviewing some economic tools for estimating demand for urban environmental infrastructure services.

5.1 Current Theory and Practice

The two main approaches to pollution control and waste management are command-and-control (regulatory) and economic, or incentive, strategies. The most common strategy used to date is that of command and control. This involves direct regulation and includes monitoring and enforcement systems. It relies primarily on application of regulatory instruments, such as standards, permits and licenses, as well as land and water use controls. The command-and-control approach gives a reasonable degree of predictability about feasible reductions in pollution levels. The main criticism of this approach is that it is economically inefficient and difficult to enforce. However, given these criticisms, command-and-control strategies have made significant progress in meeting the objectives of environmental policies and legal applications. (9)

A number of economic instruments for pollution control have been introduced in recent years, mainly by industrialized countries. These include pollution charges, marketable dischargeable permits, subsidies and enforcement incentives. Economic instruments are aimed at introducing more flexibility, efficiency, and cost-effectiveness into pollution control measures. In theory, these economic instruments act as incentives to polluters to choose their own means of pollution control. Economic instruments rely on the market to regulate pollution and therefore facilitate deregulation and a reduction in government involvement. In practice, economic measures have not eliminated the need for standards, monitoring and enforcement and other forms of government participation. Generally, economic instruments support and supplement direct regulation.

Table 2 sets out types of regulatory and economic instruments as they apply to three major areas of the urban environment.

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Table 2

Regulatory and Economic Instruments

	Regulatory	Economic
Surface Water Pollution	Standards	Pollution Charges
	Permits and Licenses	Marketable Discharge Permits
	Controls on Special Water Use	Subsidies
		Enforcement Incentives
Ground-Water Protection	Standards	Subsidies
	Permits and Project Review	Enforcement Incentives
	Land Use Controls	
	Controls on Ground-Water Extraction	
Solid Waste Management	Standards	Charges
	Permits and Licenses	Subsidies
	Solid Waste Plans	Deposit-Refund Systems

The following discussion of certain of these economic instruments is taken directly from reference (9), which may be consulted for further detail.

Pollution Charges. Pollution charges establish the level of expenditure that will be made to control incremental units of pollution, but leave uncertain the resulting level of environmental quality. Their application is particularly appropriate when the damage from incremental units of pollution can be estimated reliably, and is inappropriate when regulators require certainty in the level of environmental quality achieved. They encompass several types of instrument used for the purpose of controlling environmental degradation. They include effluent of emission charges, user charges, product charges, administrative charges and tax differentiation.

Marketable Discharge Permits. Under a marketable permit system, the responsible authority determines a target level of environmental quality, defined as an allowable level of emissions or as an ambient quality standard. This level of environmental quality is translated into a total number of allowable permits. Permits are distributed to firms and can be transferred from one firm to another. There are two basic approaches to implementing a marketable permit system. These are: (1) government auction of permits; and (2) free distribution of permits to dischargers, followed by trading among dischargers to establish a market price.

Enforcement Incentives. Enforcement incentives are economic instruments tied to direct regulation. They are designed to encourage dischargers to comply with environmental standards and regulations. Enforcement incentives include non-compliance fees or fines, performance bonds and liability assignment. They also include denial of public subsidies and financing, and partial or total suspension of plant operations.

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Subsidies. Subsidies include grants, low interest rate loans and tax incentives that act as incentives to polluters to change their behavior or reduce the costs of pollution abatement to be borne by polluters, both public and private. For example, governments provide grants to industry primarily to help finance pollution abatement equipment purchases, to subsidize personnel training, for technical research and possibly for assisting in the adoption of new techniques required by legislation or regulations. These usually apply to pollution control and recycling schemes.

Deposit Refund Schemes. Under this approach, consumers must pay a surcharge when purchasing potentially polluting products. When consumers or users of the product return it to an approved center for recycling or proper disposal, their deposit will be refunded. This instrument is applied to products that are either durable and re-usable, or are not consumer during consumption, such as plastic containers, cardboard, etc.

5.2 Application to Indonesia

In 1990, the Environmental Impact Management Agency, BAPEDAL, was set up to assist in controlling pollution in the country. BAPEDAL has responsibility for developing pollution control policies, implementing hazardous waste regulation, monitoring environmental quality and pollution control and assessing the environmental impacts of private and public resource development projects -- see Annex D.2.

The paper by Dr. Glen Anderson concerning approaches to pollution control and waste management with regard to BAPEDAL's environmental management strategy, concluded that a standard regulatory approach is likely to continue to be the cornerstone of the strategy. The report explained that economic mechanisms could be complementary to the regulatory program, and recommended that opportunities in this direction should be explored. (8)

Specific recommendations that apply to the environmental infrastructure sectors of water, waste water and solid waste management are summarized below:

* **Controlling pollution by reducing the amount of waste that needs treatment (solid waste management)**

  Opportunities for making productive use of waste material need to be studied and appropriate projects developed. A second component of study would focus on the identification and assessment of institutional, economic and political barriers to the development of markets for waste and waste products. Options for creating these markets may include subsidies, tax credits, educational programs targeted at households and small businesses and government procurement programs.

* **Liability rules for waste water and solid waste management**

  Liability rules serve to communicate to firms the nature and extent of their responsibilities for accidental spills and releases. They can be used implemented in conjunction with standards. At the present time there are barriers to the use of financial responsibility rules.

* **Performance and compliance bonds (waste water)**

  Performance or compliance bonds can be built into a permit system. If the permit holder fails to abide by the conditions of the permit, for example the discharge level for waste water, all of part of the bond posted would be forfeited.

* **Optimal pricing of waste disposal**

  There are three options for facilities to meet waste disposal standards: waste reduction, pollution control and waste disposal. It will be important to provide clear price signals to guide facilities' decisions. A study on waste disposal pricing practices should be carried out.

5.3 Economic Tools for Demand-Driven Planning

Recently, attention is being paid to market-driven approaches to the establishment of appropriate levels of service for urban infrastructure and services. Traditional supply-driven approaches to infrastructure were based on generalized planning models which set infrastructure targets for basic services based on national criteria. For example, urban water systems were often planned around a provision of, say, 100 liters per person per day or public taps placed every 50 meters or so, regardless of consumer preferences.

The appreciation of the need to involve consumers or users in planning decisions is based primarily on the greater dependence on consumers for financing of services through cost recovery. In the past, infrastructure services were most likely to be funded out central revenues and often provided free or charge or a minimal or token payment. Greater emphasis on cost recovery demands that the level of service and the quality of service provided is in line with what consumers want and what they are willing to pay for. Moves are in hand to try to involve consumers in pricing decisions, or at the very least to understand their behavior in various market situations.

A number of economic tools have been developed for estimating demand for various urban services. The most common is to estimate demand for goods and services from current market data based on actual behavior (revealed preference). Using consumer demand theory, economists can infer people's maximum willingness to pay for a service, given reasonable assumptions about the underlying utility functions. Other benefit estimation approaches include hedonic property value analysis and random utility models.

5.3.1 Willingness to Pay Models

In order to estimate economic benefits associated with the provision of goods and services, economists have traditionally preferred to use information on individuals' (or households') actual behavior. This information is used to derive individuals' maximum willingness to pay

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for different amounts of goods or services. Demand analysis based on actual behavior can be called "revealed preference".

Willingness to pay studies can also be used where there is no apparent "market" for a particular good or service. For example, if a community wants to switch from the use of pit latrines to water borne sewerage, but decision makers are not sure if the community or people to be served will pay the higher cost of a new system, a willingness to pay study could be undertaken. "Willingness to pay" studies use the technique of contingent valuation. The theory behind this approach is that each individual or individual households makes decisions on how much they are willing to pay based on individual households' constraints, such as time, income, health, age, etc. The decision to "pay" for an improved service is therefore contingent on a number of factors specific to each person or household. Questionnaires or surveys for willingness to pay analysis often included "bidding" type questions which bid prices for different levels of service. (12)

5.3.2 Hedonic Property Value Models

Hedonic property value (HPV) models offer an alternative to traditional water-demand models as a means for estimating the economic benefits to households of an improved water system. The HPV model is based on the belief that households reveal their preferences for improved water systems in the prices that they pay for housing -- either in the rent or in the purchase of their house. Because access to the water source can be part of a bundle of characteristics associated with a particular housing option, individuals who value improved water sources will be willing to pay more for a house with a good water or sanitation service than for a house with an inadequate service. This increased demand is reflected in the market price for housing in locations where houses have different urban utilities.

A variation in the HPV approach is to ask respondents who are living in houses without water services or sanitation how much they think their house would be worth if it did have these services. Households are often likely to have an idea of the premium associated with improved services. In squatter settlements, however, sometimes connection to a utility implies increased security of tenure and benefits measured are wider than just improved utilities.

5.3.3 Random Utility Models

A third approach to demand estimation, based on households' actual behavior, is a random utility model. This approach attempts to infer households' willingness to pay for an improved water system from information on the decisions they make as to whether or not to connect to the system. The methodology for the random utility approach is still in the preliminary phases of development but may prove another useful tool in establishing studies from the demand-side perspective.

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ANNEX E

GOI URBAN DEVELOPMENT POLICIES

Executive Summary: *Progress and Issues in Indonesia's Urban Development and Priorities for Policy Analysis, Strategy Formulation and Programming*, Deputy V, BAPPENAS.
14 March 1992

Municipal Finance for Environmental Infrastructure

EXECUTIVE SUMMARY

The present report has been prepared in response to the request of the United States Agency for International Development (USAID), in the letter dated 14 January 1992, from the Mission Director, USAID, to the State Minister for National Development Planning/ Chairman, BAPPENAS, as a part of the information required for decisions on the disbursement of the fourth tranche of US$25 million in the Government of Indonesia - United States of America Housing Guarantee Loan (HGL) Agreement dated May 9, 1989, as amended May 3, 1990.

One of its purposes is to analyse progress towards the implementation of the Policy Action Plan associated with the HGL.

However, the report has a broader purpose also. It is intended to relate the work on the six policy areas of concern in the HGL to the basic framework for urban policy analysis that is now evolving.

Urban policy is discussed as one of five components of the analytical framework needed to plan and guide urban growth. Those components are: the objectives of urban development; urban policy; urban strategy; specific programmes for urban development; and a system for monitoring and evaluating the impact of policies, strategy and programmes, in order to improve them systematically and adapt to changing conditions.

The report is organized in two parts. Part I summarizes progress in urban development and the formulation and implementation of urban policy during the year that has passed since the report "Progress and Issues in Indonesia's Urban Development", which was prepared by the Office of Deputy V, Bidang Regional dan Daerah, BAPPENAS, for the issuing of the third tranche of the USAID Housing Guarantee Loan. Part II identifies the Action Plan proposed for the next two fiscal years, 1992/93 and 1993/94, to develop urban policy and strategy more fully and to accelerate and strengthen programme implementation. Action in these two years is needed to address outstanding issues in Repelita V, and to prepare for Repelita VI.

PART I: Progress and Issues in Urban Development

There can be little doubt about the increasing importance of urbanization in Indonesia's economic and social development. The results of the 1990 census indicate an average annual rate of growth of the total urban population of 5.4% between 1980 and 1990 -- one of the highest urban growth rates in the world. Individual major cities with populations of 200,000 to 2.5 million (excluding Jakarta) are growing at rates ranging from 3% to just over 6%. The total urban population in 1980 was 32.8 million -- approximately 22 percent of a total population of 147.3 million. In 1990 it was 55.5 million -- approximately 31 percent of the total population of just over 179 million. If the 5.4% growth rate is sustained, the urban population will be approximately 72 million in 1995 -- only three years from now. At the present rate of growth approximately 3,300,000 people (equivalent to a city larger than Surabaya, or six cities the size of Padang) are being added to the urban population every year.

Urban output constitutes somewhere between 40 and 50 percent of GDP (somewhere between 50 and 60 percent if oil and gas are excluded). Even with present deficiencies in infrastructure and urban services, average output per capita in urban areas is much higher than the average for rural areas. The Nation's cities also are centers of higher education and specialized social services. They are centers of social change. They are engines of innovation and economic transformation.

Relatively rapid urbanization is not reversible in the near term. It is linked intimately with economic growth and diversification.

The urban management task associated with the growth that is foreseeable and with the rectification of existing deficits in urban services clearly is challenging. The importance of the task also is clear. With proper management, Indonesia's cities can be major contributors to development. Without it, the economic, social and environmental costs of urbanization are likely to be very high.

Although the overcrowding, deficient services, environmental degradation and other problems of the Nation's cities may be uppermost in the minds of many who are concerned with urbanization, there is much that is happening -- perhaps more subtly -- that is positive.

Progress and issues are reviewed in Part I of the present report under several headings -- urban policy and strategy formulation; provincial and local planning and budgeting; the attack on poverty; physical improvements in urban areas; environmental management; investment in urban areas; urban financing and fiscal development; and institutional development.

The Government's increasing concern with urban policy and strategy is reflected in a variety of activities, informal as well as formal, and in a number of policy and strategy documents. A draft Spatial Planning Law was prepared by Tim Tata Ruang Nasional and submitted by the Ministry of Population and Environment to the House of Representatives on August 6, 1991. The Housing and Settlement Law (Undang Undang Perumahan dan Pemukiman) has been prepared by the Ministry of Public Housing, and reviewed by the government, and was signed into law the first week of February 1992.

However, although there is an implicit urban strategy, identifiable by the priorities being given to individual urban centers and by the composition of investment in urban infrastructure, there is no explicit strategy which has been formally adopted by the Government. Moreover, there is not a single implicit strategy, but several. Investments in the major economic sectors, such as industry and tourism, are emphasizing economic diversification and growth. Some regional infrastructure development is supporting this. Other regional infrastructure investments appear to be concerned more with geographic and economic integration, the rectification of regional inequalities, and stability. Urban investments in the traditional infrastructure sectors still are concerned with "basic needs". The pattern of urban growth that is being supported directly or indirectly is closer to the first scenario in the 1985 National Urban Development Strategy (NUDS) study (industrial emphasis with gradual decentralization), rather than the second, recommended, scenario (intermediate sectoral emphasis with rapid decentralization), or the third scenario (agricultural emphasis with accelerated decentralization).

Provincial and local government capacity for planning and budgeting, including the preparation of five-year plans and annual plans and budgets analogous to the national plans and budgets, began to be strengthened with the nationwide establishment of the provincial and local planning boards (BAPPEDAs). While the capacities of these agencies still vary considerably from province to province and among local governments, they are being strengthened gradually and have the potential for improving the quality of programme and project preparation at the local level and linking local and provincial priorities more systematically with national priorities. The system of local, provincial, regional and national consultations, in the annual Rakorbang process, is designed to achieve this. The establishment of the Integrated Urban Infrastructure Development Programme (IUIDP) in 1985, constitutes another step towards more adequate local development programming. It is expected to be one of several instruments for achieving a fundamental strengthening of planning and management capacity at the regional level.

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In spite of this progress, the Government's urban programme still is suffering from slow project preparation, delays in implementation, even after funds have been committed, and, in some projects, inefficiencies in the process of implementation.

Regional transport facilities (ports, airports, roads, railways), power distribution networks and telecommunications are needed to support urban growth and can be used to guide it. However, regional infrastructure investment is not yet adequately coordinated with investments in urban areas.

Indonesia has been relatively successful in reducing the levels of poverty in both rural and urban areas. The overall poverty level was down from an estimated 40.1% of total population in 1976 to an estimated 15.2% in 1990. The percentage of the urban population living below the poverty line decreased fropm 39% to 17% in the same period. However, there has been a decrease of only 6 percent in the absolute number of persons affected. Moreover, within the total population living below the poverty line, the share of the urban group increased from 19% in 1976 to 35% in 1990.

During Repelita IV considerable progress was made in improving urban infrastructure. The basic strategy through which this was achieved is being continued during Repelita V, with an increased emphasis on improving conditions for the urban poor, and increasing attention to improved financial planning and management and improved operations and maintenance. Approximately 24,100 hectares in urban settlements were upgraded through the Kampung Improvement Programme, benefitting approximately 6 million households. However, the percentages of urban households without access to proper urban services, including safe potable water, still is very high. Although some progress is being made with land consolidation on a limited scale, there is a need now for a more systematic attack on the urban land management task.

An increasing concern with environnemtal management is reflected in the establishment of the Ministry of Population and Environment (KLH), the national environmental monitoring and enforcement agency (Bapedal), and the enactment of basic environmental legislation. However, there is a need now for more specific incentives and regulatory instruments to achieve satisfactory environmental conditions in the Nation's urban areas.

Although reliable data on all governmental investment in urban areas are not available, very crude estimates suggest that, from a level of Rp.2,248 billion in 1984/85, the total increased to Rp.3,298 billion (in 1984/85 prices) in 1988/89. These amounts, related to the estimated urban population, indicate that per capita investments, in constant 1984/85 prices, decreased from approximately Rp.55,644 in 1984/85 to Rp. 47,347 in 1985/86 and Rp. 41,670 in 1986/87. They then increased to approximately Rp.48,640 in 1987/88 and Rp. 66,098 in 1988/89.

Although the levels of investment that have occurred, and the increases that have taken place in some periods, are impressive, present levels of expenditure appear to be too low to rectify deficiencies in existing infrastructure and provide for foreseeable urban growth. The level of investment currently planned for urban infrastructure is well below the level that was judged to be necessary during the preparation of Repelita V. The average annual investment estimated to be necessary in the Cipta Karya subsectors was approximately Rp.1,860 billion. The level planned for 1990/91 was approximately Rp.1,094 billion (59% of the earlier estimate). The actual level of investment in the Cipta Karya subsectors for 1990/91 was approximately Rp.760 billion -- about 70% of the planned level and only 41% of the earlier estimate of average annual requirements. Institutional capacity to implement appears to be more of a constraint than the availability of funding -- at least in the short run.

There has been substantial progress in some aspects of the financing of urban development. The new property tax, PBB (Pajak Bumi dan Bangunan) simplified the previous property-based tax system by consolidating land-related taxes, it broadened the base by reducing exceptions, it changed the base from rental to capital market value, it reduced equity distortions and it established strict deadlines and penalties for non-payment. During the period 1985/86 through 1989/90 the total yield increased from Rp.155 billion (about US$160 million) to Rp.615 billion (about US$330 million), an increase of 106%. The corresponding increase in the urban component of the PBB was from Rp.34.1 billion (about US$35 million) to Rp.128.8 billion (about US$69 million), an increase of approximately 97%. There have been substantial improvements in the municipal tax assessment and collection system (MAPATDA). From 1984/85 to 1988/89, local governments' own-source revenues (including their share of the property tax -- PBB), as a percentage of all local revenues, increased from approximately 20% to 26%. A draft law for increasing the cost-effectiveness of local taxes and charges has been prepared. A new instrument for lending for local government investment in essential urban infrastructure, the Regional Development Account (RDA) was established through the Ministry of Finance's Decree No. 1021/KMK.013/1991, which was signed on September 30, 1991. Improvements in financing for operations and maintenance, on a trial basis, have been significant. Increasing efforts are being made to find ways to give more planning, financial and management responsibility to the local (Tk II) level. An Urban Development Inpres fund of Rp. 40 billion has been included as part of the Inpres Dati II program for fiscal 1992/93. This should help to assess the potential advantages and disadvantages of such a fund, prior to deciding whether to provide it at a larger scale. The strengthening of private sector involvement in the financing and management of urban public services is receiving increasing attention. One of the most recent steps in this effort has been the initiation of the PURSE Project, with USAID funding.

However, there still is a need for a rationalization of intergovernmental financial relationships to make it possible to use governmental resources more efficiently, to relate grants more systematically to poverty alleviation, and to provide stronger incentives for improved financial performance at the regional government level. Improvements are needed in policies for, and the use of, central government investments, transfer payments, the generation and management of local governments' own revenues, borrowing by local governments for development expenditures, and the mobilization of non-governmental investment for the provison of public facilities and services. Truly local revenues, excluding the property tax, still constitute a very small proportion of local revenues in most cities. There is a need for a restructuring of the local revenue base, including the elimination of taxes and charges which are unlikely ever to be cost-effective, and, perhaps, the assignment of several additional revenue sources, such as vehicle taxes and the property tax, to the local level. The private sector, both formal and informal, is playing a major role in aggregate urban investment but still is very much a minor partner in investment in the provision of public services. There is a long-term need to mobilize domestic savings for voluntary investment in urban infrastructure at a significant scale. Central government subsidies cannot be sustained at levels adequate to finance the infrastructure needed to rectify existing deficits and provide for the very rapid growth that is foreseeable. External assistance agencies' potential lending and grant programmes can meet only a very small part of the need.

In institutional development, progress has been made with the upgrading of a second Kotip (Denpasar) to Kotamadya status. The DPOD has decided that additional Kotip's will be upgraded soon. Five of them are provincial capitals. Responsibility for the coordination of initiatives in the formulation of urban and regional policies and strategies now rests clearly in BAPPENAS, under the leadership of Deputy V (Bidang Regional dan Daerah). Technical assistance for urban institutional development is continuing through the IISP (INS/89/014) and other projects. Intensive assistance is being provided to selected Kotamadyas and their respective provincial governments in the preparation of local programmes and projects and in their

implementation. There is a special concern to facilitate accelerated implementation. In the implementation arrangements for the East Java/Bali UDP and the Sulawesi UDP, provision is being made for local governments to play a stronger role. Efforts are being made also to integrate training and technical assistance, utilizing the resouces available through the substantial consultant inputs in these projects. Proposals have been developed for transfers of technical and administrative staff from the central level to the regional level, through secondments and/or full transfers. Other measures for attracting highly qualified staff to the local level are under consideration. The first phase of a study of administrative reform has been completed for GOI, with MENPAN as the executing agency.

However, one of the most striking features of the present situation is that there is no "critical mass" of expertise in urban management and finance in Indonesia. Nor is there yet a definition of the nature or the scale of the urban management task to be undertaken in the face of a very high rate of urbanization coupled with rapid economic growth and diversification. Achieving some degree of consensus on this is a prerequisite for mobilizing the resources to create the necessary management capacity. Although training for some aspects of urban management is being carried out in some university and other programmes, no part of the existing system is truly providing training or technical assistance for urban management at the local level, or for central government oversight of urban development. Most of what is available is sector-oriented, project-oriented, or treats only one or two urban management skills. The number of qualified managers, staff and technical specialists being produced by the existing delivery system is nowhere near sufficient to meet the foreseeable need for skilled professionals in the several levels of government which have to be responsible for urban management -- in particular, government at the local level.There is no domestic system for delivering technical assistance systematically to local governments. Central agencies are not yet well-equipped for this and the private consulting industry is still in the early stages of development. Governmental agencies at all levels still are heavily dependent on project-related external funding for whatever technical assistance they obtain. There is a need for a fuller integration of the IUIDP in the regular activities of local government. There is a need for a more effective use of consultants. There also is a need for more adequate committments of the staff resources of some of the principal external assistance agencies.

PART II: Priorities for Future Work on Urban Policy, The Updating of Urban Strategy, Programme Preparation, and Project Implementation

The experience gained in the urban programme during the last several years, together with ongoing analyses of progress and issues in urban development, make it possible this year to put future policy in a framework of coordinated action which links urban policy work, strategy formulation, programming, project implementation, and the monitoring of urban development, in such a way that they are mutually reinforcing.

This action framework is intended to make it possible to meet the Government's immediate need to improve and accelerate the implementation of urban programmes in response to severe deficiencies in urban infrastructure and urban management systems, and in response to rapid urban growth. It is intended to enable programmes to be strengthened systematically as a result of deeper policy analysis. And it it should make it possible for policy updating and strategy formulation to benefit from a systematic monitoring of development and a series of innovative and experimental projects which are being undertaken in the relevant central government agencies and in selected local governments.

The framework proposed is expected also to help to coordinate, and maximize the benefits from, ongoing technical assistance.

The major components of the framework are: identification of problems and opportunities in urbanization; establishment of the objectives for urban development, as a part of national social and economic development (together with criteria for choosing among options for development, based on these objectives); urban policy analysis and formulation; urban strategy formulation; experimental implementation to test policies and strategies on a limited scale; the ongoing preparation and implementation of major urban programmes and projects; systematic monitoring of development, to provide a basis for future policies, strategies and programmes; long-term institutional and staff development to provide for the sustained planning and management of urban growth; and data base development and information management to support all of these activities.

Within this framework, the major components of the urban action plan for the next two years are:

(1) Programme and Project Implementation -- Improving and Accelerating the IUIDP

- (a) Clarification of Priorities
- (b) Strengthening the Content of the IUIDP
- (c) Improved Project "Packaging"
- (d) Completion, Dissemination and Application of IUIDP Guidelines and Manuals for Preparation, Appraisal and Implementation
- (e) Intensive Staff Training for the Management of IUIDP Implementation

(2) Policy Formulation

- (a) Updating of the Objectives of Urban Development
- (b) Broadening the Policy Framework
- (c) Analysis of Existing Conditions in Urban Areas and Ongoing Management of Urban Development
  - (i) Consolidation and Analysis of Information Already Available
  - (ii) Analysis of Urban Growth, Using 1990 Census
  - (iii) Additional Research
- (d) Policy Analysis and Formulation
- (e) Staffing for Policy and Strategy Analysis

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(3) Strategy Development and Experimental Implementation

(a) Analysis of Basic Strategy Options and Strategy Updating

(b) Land Management

(c) Urban Environmental Management

(d) Water Supply and Sanitation

(e) Urban Transportation

(f) Improved Operation and Maintenance of Infrastructure

(g) The Planning and Development of Regional Infrastructure

(h) Private (Commercial, NGO and Community) Participation in the Provision of Urban Facilities and Services

(i) The Financing of Urban Development

(i) Intergovernmental Financial Relationships

(ii) Local Government Revenues

(iii) Local Government Financial Planning and Management

(iv) Local Government Borrowing

(v) Long-term Mobilization of Domestic Savings for Investment in Urban Infrastructure

(4) Institutional and Staff Development

(a) Clarification of Roles and Responsibilities

(b) Project-related Institutional Development at the Regional Level

(c) A Shift from Project Management to Municipal Management

(d) Structural Change Through Intensive Support for Selected Local Governments

(e) Strengthening of Updated Central Government Functions

(f) Redeployment of Central Government Technical Staff to the Provincial and Local Levels

(g) Interdepartmental and Intergovernmental Coordinative Functions

(h) Long-term Institutional and Staff Development

(i) The Preparation, Dissemination and Application of Guidelines and Manuals for Urban Management

(5) Monitoring and Evaluation

(6) Data Base Development and Information Management

Each of these components of the Action Plan is described briefly in Part II. The Tim Koordinasi Pembangunan Perkotaan (TKPP) is, as before, responsible for the coordination of policy work. The IUIDP Management Group (IMG) is responsible for coordination at the technical level.

Two of the recurrent concerns in the analysis of progress and issues in Part I were effective decentralization, including the development of urban areas with real, but yet unrecognized, potential, and a more effective mobilization of private sector resources for investment in urban public services as well as basic economic development. One of the proposals made in Part II is that both of these concerns might be addressed through "Development Marketing", as an alternative to "supply-led" development which has proven to be costly and risky for the public sector in other countries.

The policy and strategy work proposed is intended to guide the urban programme for the remainder of Repelita V and prepare for Repelita VI. It will also provide inputs for the next twenty-five year plan, which begins with Repelita VI. It is hoped that the framework suggested will constitute a useful basis for mobilizing and coordinating both the Government's own resources, and external assistance, in this important undertaking.

PROGRESS AND ISSUES IN INDONESIA'S URBAN DEVELOPMENT

(March 1992)

PROGRESS	ISSUES
I. <u>Urban Policy and Strategy Formulation</u> o A study in Urban Policy is under preparation. It reviews the past and current Urban Development Policies and Strategies from Repelita I to V and the legislation framework guiding urban and regional development. The report will assist in formulating the GOI's immediate and long-term policies and strategies for urban development.	o Need for a clearer Recognition of the Role of Urban Development in terms of social, economic and environmental consideration as well in the national economic planning process. o An updating of Urban Policies and Strategies – need for a consolidated set of laws and regulations for the governance of urban areas, incorporating existing relevant legal and administrative instruments and additional requirements to recognise the nature and importance of urban management. – acceleration of the ongoing review on the policies, strategies and legal and administrative framework to formulate an updated urban investment strategy to facilitate systematic investment planning by central planning agencies in key infrastructure sectors, including transport, telecommunications, water resource development and IUIDP subsectors. – establish and maintain adequate urban policy analysis, strategy formulation and development programming, integrating with the national planning and budgeting process through creating additional analytical capacity at the central level.
II. <u>Provincial and Local Planning and Budgeting</u> o The multi-year planning and budgeting of regional and local governments have been strengthened considerably since the establishment of IUIDP in 1985. In 1988/89, there were no implementable multi-year investment programs linking physical, fiscal and institutional improvements for development of urban areas. By 1991, 100 such programs were completed and another 88 others were under preparation. Total project investment planned for IUIDP projects and those with similar features have resulted in external loans exceeding $1.0 billion. o The IUIDP medium-term investment programs (PJMs) are increasingly integrated in the annual provincial budget coordinating meetings (Rakorbang) and with the annual budget meetings of central technical ministries (Rakortek).	o Costly delays in Programme and Project Preparation and Implementation. – weak local capacity for the preparation and implementation of complex projects, inadequate guidance and capacity at central level, slow decision making particularly in financial and institutional responsibility and deficiencies in project packaging and design. o Insufficient coordination of decisions about strategic regional infrastructure, industrial and tourism development to support urban growth.

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PROGRESS AND ISSUES IN INDONESIA'S URBAN DEVELOPMENT

(March 1992)

PROGRESS	ISSUES
III. Poverty Reduction o Overall poverty levels declined from an estimated 40% in 1976 to an estimated 15.2% in 1990. o In urban areas, the number of people living below poverty line decreased from about 10 million in 1976 (about 39% of the urban population) to approximately 9.4 million or about 17% of the urban population in 1990.	o Need to accelerate measures directed at reducing urban poverty since the decrease in absolute number of urban poor is only marginal. o The environmental consequences of high density urban poor can be more severe. Need to formulate effective programme which address interrelated concerns including employment, health, education, community participation in development and access to credit. o Attention to rural poverty as rate of urbanisation is influenced partly by rural conditions.
IV. Physical Improvements in Urban Areas o Considerable progress achieved in expanding urban physical infrastructure was achieved in Repelita IV and continued into Repelita V. Between 1984/85 and 1988/89, percentage of household with access to safe portable water was estimated to increase from 55% to about 65%. Other improvements include extensive flood protection measures in urban areas, improved sanitation and sewerage facilities particularly for low income groups and urban households, and improved and expanded urban roads.	o Urgent need for a systematic program to address the complex land management issues, including land rights, physical organisation of land use, environment and so on. Existing legislative and procedures appear to be hindering land development and forcing inefficiencies in land use.
V. Environment Management o Establishment of the Ministry of Population and Environment (KLH) and Bapedal, and the enactment of basic environment legislation to deal with environment issues at all levels. A number of policies and programs are directed at improving urban environment including the Clean River Program (Prokasih) to control industrial waste water disposal and to protect water quality. Other ministerial decrees have also been issues on emission standard for air and water.	o Need for further development of environmental management policies, strategies and regulatory systems.

PROGRESS AND ISSUES IN INDONESIA'S URBAN DEVELOPMENT

(March 1992)

PROGRESS	ISSUES
VI. Investment in Urban Areas o Crude estimates suggest that urban in investments in urban areas increased from Rp 2248 billion in 1984/85 to Rp 3298 billion in 1988/89 (in 1984/85 prices). Per capita investments in constant 1984/85 prices was approximately Rp 55,644 in 1984/85, Rp 48,640 in 1987/88 and Rp 66,098 in 1988/89.	o Present levels of investment in urban infrastructure are too low to rectify deficiencies in existing infrastructure and provide for urban growth. The annual level of investment estimated to be necessary for Cipta Karya subsectors during Repelita V was approximately Rp 1860 billion. In 1990/91, the planned level was approximately Rp 1094 billion or about 60 per cent of the Repelita V annual estimates. o Underutilisation of available investment funds. For instance, actual level of investment in Cipta Karya for 1990/91 was about Rp.760billion, or 70 per cent of planned investment. Absorptive capacity, institutional as well as the project preparation and design are slowing down utilisation of investment resources.
VII. Urban Financing and Fiscal Development o Substantial progress in property tax yields (PBB) resulting from new legislation and improved administration. o Municipal tax assessment and collection system (MAPATDA), initiated on a pilot scale has proven to be successful. o The local government's resource mobilization efforts improved significantly. o Experimental programs have been introduced to some local governments to improve their accounting, programming and budgeting process, including a Program Financial Account and Management System (PFAMS) to monitor all sources of funding and planned and actual expenditures in the IUIDP. o Issuance of RDA decree in September 1991 for lending for local government investment in essential urban infrastructure. o The pilot program. The Performance-Oriented Maintenance Management System (POMMS) developed for selected cities on improving financing of O & M has been encouraging. o Increasing attention to developing private sector involvement in financing and managing urban public services. Experiment have been extended to urban water supply, water and solid waste management.	o Rationalization of inter-governmental financial relationships to relate grant more systematically to poverty alleviation and to improve the financial performance of local governments. o Need for higher level of domestic resource mobilization by local governments for their increased participation in the development of urban infrastructure and to upgrade their financial planning and management. o Fuller involvement of NGO's and community participation in the provision of urban facilities and services. o Long-term program to mobilize domestic savings voluntarily for involvement in urban infrastructure.

PROGRESS AND ISSUES IN INDONESIA'S URBAN DEVELOPMENT

(March 1992)

PROGRESS	ISSUES
VIII. Institutional Development o Issuance of various decrees to strengthen the decentralization process including devolving more authority to local governments on selected public works, establishment of TKPP to coordinate and execute all urban development programs under the leadership of Bappenas. o Formation of the IUIDP Management Group (IMG) under Bappenas and comprising Public Works, Home Affairs and Finance for overall planning, monitoring and guidance of IUIDP. o Intensive assistance to selected local government in the preparation of local programs and projects.	o Need for institutional development and faster adaptation to the Government's decentralization policies by the local government. o Government agencies at all levels were still heavily dependent on project-related external funding for whatever technical assistance they can obtain. o Training or technical assistance on urban management at the central or local level are not fully integrated. Most of available skills is still sector-oriented, project-oriented or possess only one or two urban management skills. o Need for more effective use of consultants. o Integration of the IUIDP program in the regular activities of local government needs to be reinforced.

PPANNEX, TATI/PHBT, November 10, 1992.

SECTOR DEVELOPMENT – A FRAMEWORK FOR ACTION

A Preliminary GOI Framework for Program on Urban Policy Formulation, Urban Strategy and Programme and Project Implementation.

Component of Action Plan	Priority Actions
I. <u>Ongoing Programme and Project Implementation -- Strengthening.</u>	
a. Clarification of Priorities	
o Need for clarification of geographic priorities for investment and other action and fuller coordination of governmental sectoral programs as well as clearer guidance and regulation of private activity. Priorities for addressing urban poverty need to be reconfirmed.	o Immediate clarification and fuller coordination based on available information; subsequent prioritization based on policy and strategy analyses to be developed in due course.
b. Strengthening the Content of IUIDP	
o Improving or adding components to enhance sound analysis of economic potential of urban centers.	o To incorporate in IUIDP programs currently under preparation and to be initiated by local governments.
o Improving local government financial planning and management.	o Through PAFPACK programme in assisting local government on integrated development planning and management.
o Define institutional responsibilities for traffic management in urban areas.	o Assign responsibilities for traffic management and policy coordination.
c. Improved Project "Packaging"	
o To improve on preparation of projects for external funding and accelerate their execution.	o To review government procedures concerned with project identification, preparation and processing cycle and coordinating arrangement with external agencies on implementation and financing arrangements prior to loan effectiveness. Coordinating effort with external agencies in designing urban lending "packages" to include the following (a) in accordance with IUIDP principles (b) adequate project preparation lending to PJM (c) "programmatic" approach (d) support for development of urban management (e) clearly defined institutional and financial channelling arrangement (f) clearly outlined methodology and modified approval criteria for simple sub-projects and (g) well-defined procurement arrangements including modified procedures for simpler components to encourage implementation by available local expertise and materials.
d. Completion, dissemination and application of IUIDP Guidelines and Procedures Manual for Preparation, Appraisal and Implementation.	o Revised guidelines for IUIDP to be prepared and disseminated. Update on manual for IUIDP appraisal.

SECTOR DEVELOPMENT – A FRAMEWORK FOR ACTION

A Preliminary GOI Framework for Program on Urban Policy Formulation, Urban Strategy and Programme and Project Implementation.

Component of Action Plan	Priority Actions
e. Staff Training for Management of IUIDP Implementation	
o Training of staff at central and local level in monitoring and funding implementation.	o Intensive management and staff development programs including training on IUIDP program at local level to improve on preparation of PJMs and administration arrangements on channelling of local and development funds.
II. Policy Formulation	
a. Updating Objectives of Urban Development	o In addition to basic needs and strengthening local government to recognize importance of urban development in economic development and importance of environment.
b. Broadening Policy Framework	o Linking urban policy morefully with basic social and economic development policy.
o Macroeconomic Policies	o efficiency–equity, environmentally sustainable growth, stability in individual urban areas and economic of rural areas.
o Macro Social Policies	o Individual well being, knowledge, choice participation in decision–making, social stability
o Macro–environmental Policies	o sustainable enhancement of urban environmental quality and management of sustainable development
o Sectoral Policies	o based on development objectives and macro policies
o Macro–institutional Policies	o concerning institutional strengthening of local government and changing role of central government in local development
c. Analysis of Existing Conditions and in Management of Urban Development	o Based on consolidation and analysis of existing information, analysis of urban growth using 1990 census and additional research
d. Policy Analysis and Formulation	o Analysis will be undertaken based on two components: (i) Directions for remainder of Repelita V and (ii) Preparations for Repelita VI and the next Twenty–Five Year Plan
e. Staffing for Policy and Strategy Work	o To establish an Urban Strategy Unit (USU) to support the policy, programming and coordination functions of TKPP and IMG.

SECTOR DEVELOPMENT – A FRAMEWORK FOR ACTION

A Preliminary GOI Framework for Program on Urban Policy Formulation, Urban Strategy and Programme and Project Implementation.

Component of Action Plan	Priority Actions
III. Strategy Development and Experimental Implementation	
a. Analysis of basic strategy options and strategy updating.	o Update on National Urban Development Strategy (NUDS) study, identifying role of urban development, role of individuals, types of urban areas etc. and development options
b. Land Management	o Establishment of a Working Group under one Spatial Planning Committee to implement approach to improve land management
c. Urban Environment Management	o Expand the project on Urban Government Management to review and assess current environment policies and strategies
d. Water Supply and Sanitation	o A strategic inventorying of existing conditions and conditions expanded to prevail after implementation of water supply project included in IUIDP and other programme
e. Urban Transportation	o Development or upgrading of intra–urban transport, together with other infrastructure
f. Improved O&M of infrastructure	o Replicate the Performance–Oriented Management System (POMMS) to all urban areas
g. Planning & development of Regional Infrastructure	o Closer coordination in the identification, preparation and implementation of regional projects (power, telecoms, sea, air and land transport) with the preparation and implementation of urban projects
h. Private Participation in Provision of Urban Services	o Identify specific opportunities on experimental for private participation such as through Purse Project and IISP
IV. Financing of Urban Development	
a. Intergovernmental Financial Relationships	o Finalization of draft legislation for linking more systematically the financing from DIP allocations. INPRES allocations, provincial and local revenue improvement, their borrowing for capital expenditures and private sector equity participation
b. Local Government Revenues	o Finalization of legislation to streamline local government revenue base and more discretionary authority to improve collection and administration of local taxes
	o Extension of MAPATDA system to other local governments

SECTOR DEVELOPMENT – A FRAMEWORK FOR ACTION

A Preliminary GOI Framework for Program on Urban Policy Formulation, Urban Strategy and Programme and Project Implementation.

Component of Action Plan	Priority Actions
c. Local Government Financial Planning and Management.	o Refinement of PAFPACK to include local governments MAPATDA and RIAP programs and extension of this system to more local government
d. Regional Government Borrowing and borrowing from Domestic Savings for investment in Urban Infrastructure.	o Operationalization of RDA
V. Institutional and Staff Development	
a. Clarification of Roles and Responsibilities	o Finalization of instructions on relevant central, provincial and local entities organizational and staff responsibilities
b. Project–related Institutional Development at Regional Level.	o Regular review on institutional arrangements for purpose of implementing IUIDP projects to improve coordination and increase accountability
c. Shift from Project Management to Municipal Management.	o Institutional strengthening of municipal management to implement fully the Government's decentralization policies
d. Structural Changes in local government planning and management through intensive support for selected local governments.	o Institutional improvement at local level to improve on coordination, system planning, financing and financial management and systems operations and maintenance in the key enterprises responsible for key public services
e. Strengthening of Updated Central Government functions.	o An intensive program of management and staff training in key departments to undertake new and increasing responsibilities
f. Reemployment of staff to local levels	o Programme of reemployment of central level technical staff to strengthen local government including supplementary training
g. Coordination inter–and intra government and intra governmental departments.	o Clarification of the role and responsibilities of IMG and TKPP
	o Establishment of the Urban Strategy Unit (SDU)
h. Long–term Institutional and staff development	o Institutional development and training to include central, provincial and local government
i. Guidelines and Manual for Urban Management	o Preparing, disseminating and implementing updated guidelines and manuals for urban management
	o Installation of an MIS to inventory and provide easyt.. access to laws and regulations

SECTOR DEVELOPMENT – A FRAMEWORK FOR ACTION

A Preliminary GOI Framework for Program on Urban Policy Formulation, Urban Strategy and Programme and Project Implementation.

Component of Action Plan	Priority Actions
VI. Monitoring and Evaluation	
o Design and installation of M & E Program	o Establish the M & E program for TKPP and IMG and eventual extension to other level of Government
VII. Database and Information Development	
o Dissemination of data from and between different levels of government.	o Working group established to review current MIS and plan for coordinating MIS between central, provincial and local authorities on planning and management of urban and regional development program

ANNEX F

INTERIM EVALUATION OF MUNICIPAL FINANCE PROJECT

Executive Summary: *Interim Evaluation: Indonesia Municipal Finance Project*. G. Thomas Kingsley and George E. Peterson, The Urban Institute for USAID/Indonesia. July, 1992.

Municipal Finance for Environmental Infrastructure

EXECUTIVE SUMMARY

This report is the interim evaluation of the Indonesia Municipal Finance Project (MFP). Under the joint agreement for this Project: (a) USAID is providing a $100 million Housing Guaranty Loan (HGL) for capital investment and $5 million in Development Assistance grants for technical assistance and training; and (b) the Government of Indonesia (GOI) is implementing a Policy Action Plan whose goal is to "improve the shelter conditions of the urban poor by developing the means by which municipal governments can finance shelter-related urban services and infrastructure at a pace sufficient to overcome present deficits and match the pace of urban population growth". The GOI has made a commitment to transfer both the responsibility and authority for the leading public sector role in urban development to local governments, and to substantially improve local management capacity and resource mobilization. The Policy Action Plan provides the framework for achieving these ends.

PURPOSE OF THE EVALUATION AND METHODOLOGY EMPLOYED

The evaluation assesses GOI progress under the Policy Action Plan and performance under the Project's technical assistance and training component. It is intended to provide a basis for decisions about amendments to the existing program and design of a possible new HGL program. The evaluation was conducted by two senior urban policy specialists (in Indonesia for three weeks) who examined the record of policy change as documented by GOI and international donor reports, interviewed GOI officials in all agencies dealing with the urban sector and gathered unpublished information regarding sectoral investment and financing, reviewed the products of the MFP technical assistance team, interviewed 14 participants in training programs supported by the Project, and met with consultants under the related IUIDP program as well as the World Bank urban sector team.

MAIN FINDINGS AND CONCLUSIONS

Performance under the Policy Action Plan. The GOI has made, and continues to make, substantial progress toward the program's basic objectives. Over the course of the program, its major accomplishments have been: transforming the process by which urban infrastructure is programmed to one in which coordinated planning and project preparation occur across sectors for individual cities (with strong local government participation and linkage to local resource mobilization); substantially improving the management of the property tax and other local own source revenues, and enhancing their yields; setting a sound base for expanding private sector participation in urban services; establishing the groundwork for increased municipal borrowing for urban infrastructure and operationalizing the Regional

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Development Account (RDA) as a major step toward a market-based credit system for local government; and establishing and maintaining a viable framework for interministerial coordination at the central level.

These accomplishments are noteworthy and are sustainable if appropriate support is given in the next stages of program development. The GOI's continuing commitment to the program was underscored by the 1992 *Issues and Priorities Report* prepared by the National Planning Agency (BAPPENAS), which presents a critical evaluation of progress under the current program and priorities for the next stages in its development. Nonetheless, the program faces serious challenges at this point. Urban infrastructure investment is falling behind in relation to needs and government targets. Urban environmental degradation--not now being addressed by the program--threatens the basic objective of improving the living conditions of the urban poor. Some the key reforms--particularly, the transition to a market-based credit system and decentralization of investment priority-setting--are vulnerable unless they receive further external reinforcement. Priority should be given to: central reforms that allow local governments to raise the revenues necessary to manage urban development effectively; preparation of a focused strategy for building on the RDA as a transition institution designed to open municipal access to private credit markets; new initiatives for effective urban environmental quality management; rapid development of an indigenous system for building local capacity in urban management; and establishing processes that allow clearer expression of local demand in framing, financing, and implementing local investment programs.

The Technical Assistance and Training Component. Performance under this component has been effective. Advisors have produced valuable outputs in all phases of the Project and their services are clearly valued by counterparts. They have reached out strategically to address priorities under the overall Plan and to promote interagency collaboration. Their activity is in large part responsible for key achievements under the Plan since 1990, particularly in private sector participation and program monitoring. Accomplishments include issuance of a series of research reports tied to critical policy choices; several major seminars to promote management reforms; and an extensive training program. Initial planning for an indigenous urban management training program, in collaboration with other donors, is an important achievement. Still, more forceful effort should have been provided in policy analysis and design to help motivate full achievement of basic reforms in the finance agenda.

AID's Role. USAID support has played an influential role in the GOI's program. It was critical in advancing the agendas for private sector participation and the RDA, has filled an important void in motivating the overall continuity of an urban sector program, and appears to have achieved true additionality in urban infrastructure investment. Continued support from AID and other donors for some years will be essential if the delivery system promised by this Plan is to become fully institutionalized and self-sustaining.

PRINCIPAL RECOMMENDATIONS

1. The overall program has been successful and should be continued through a new HGL program and extension and intensification of technical assistance support.

The Policy Action Plan

2. The basic elements of the current Policy Action Plan should be carried forward as the basis for measuring progress in sectoral reform in the new HGL.

3. Emphasis in a new HGL should be placed on key policy elements where AID's technical assistance can have the most effect: development of a market-based credit system for municipal lending, new initiatives to create effective (and locally directed) urban environmental quality management, and the introduction of a greater element of local choice into local revenue generation and investment planning.

4. The RDA should be strengthened as the principal source of municipal credit in the near future. It should operate according to an intermediate-term plan for opening municipal access to private credit markets.

5. Local sample surveys of household beneficiaries should be conducted to monitor more effectively the income targeting of investments and tariff policy.

Technical Assistance

6. Technical assistance will be required over the lifetime of a new HGL, and should be planned by AID.

7. Although the long-term advisors will have to continue to be responsive to work requests from counterpart agencies, greater effort should be made to focus TA products on the principal bottlenecks to implementing the Policy Action Plan. The quarterly meetings recommended below should be used to agree on priority tasks.

8. Short-term TA should be used more directly to reinforce the long-term TA advisors. The new long-term TA agreement should include a budget for short-term TA.

9. Topics deserving more TA emphasis include: development of a strategy for building the RDA into a market-based credit system; introduction of strategic planning and forceful implementation for environmental quality enhancement into urban investment planning and management; institutional devices for building community and private-sector demand into the process of local investment priority setting and for streamlining processes of project appraisal, financing, and implementation ; implementation of plans for indigenous training in urban management; design and implementation of household surveys to determine

the income incidence of the urban investment program.

Investment Plan

10. Resource allocations under the Investment Plan should more directly reinforce the policy objectives of the Policy Action Plan. This implies directing a larger proportion of funds through the RDA and using the Investment Plan to finance public-sector support for private participation in urban services and environmental infrastructure.

Administration and Monitoring

11. Quarterly meetings of the MFP Interministerial Counterpart Committee, USAID, and the TA team should be held. Objectives: to agree on a work program that reflects Policy Action Plan priorities, and to monitor progress on previous TA work plans.

12. The MFP Indicators report should be updated semi-annually, and be incorporated within a broader regular report on Policy Action Plan progress to be reviewed as a basis for planning and corrective actions in regular meetings of TKPP.

13. BAPPENAS should be clearly invited to participate as a member of the MFP Counterpart Committee. Because of its central role in relation to the Policy Action Plan, the addition of MFP technical assistance support directly to BAPPENAS should also be considered.

LESSONS LEARNED

1. The Project provides a model for how a policy-based sectoral HGL should function. It demonstrates that long-term involvement in an integrated program with clearly focused policy sub-objectives can lead to important, measurable policy change while avoiding the dangers of project fragmentation.

2. Decentralization to the local level of revenue sources must occur in tandem with decentralization of investment planning for either to be fully effective.

A:\MFEI.F, ML, November 4, 1992.

ANNEX G

STATUTORY CHECKLIST

Municipal Finance for Environmental Infrastructure

THE HOUSING GUARANTY PROGRAM
STATUTORY CHECKLIST
INDONESIA

PROJECT NO. 497-HG-006

	ANSWER YES/NO OR PUT PP PAGE REFERENCES AND/OR EXPLANATIONS WHERE APPROPRIATE
A. General Criteria Under HG Statutory Authority	
Section 221(a)	
Will the proposed project meet the following criteria:	
1) is intended to increase the availability of domestic financing by demonstrating to local entrepreneurs and institutions that providing low-cost housing is financially viable;	YES
2) is intended to assist in marshalling resources for low- cost housing;	YES
3) supports a pilot project for low-cost shelter, or is intended to have a maximum demonstration impact on local institutions and national policy and	YES
4) is intended to have a long run goal to develop domestic construction capabilities and stimulate local credit institutions to make available domestic capital and other management and technological resources required for effective low-cost shelter programs and policies	YES

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Section 222(a)

Will the issuance of this guaranty cause the total face amount of guaranties issued and outstanding at this time to be in excess of $2,158,000,000?	NO
Will the guaranty be issued prior to 30 September 1993?	YES

Section 222(b)

Will the proposed guaranty result in activities which emphasize:

1) projects providing improved home sites to poor families on which to build shelter and related services	NO
2) projects comprised of expandable core shelter units on serviced sites	NO
3) slum upgrading projects designed to conserve and improve existing shelter	YES
4) shelter projects for low-income people designed for demonstration or institution building	YES
5) community facilities and services in support of projects authorized under this section to improve the shelter occupied by the poor?	YES

Section 222(c)

If the project requires the use or conservation of energy, was consideration given to the use of solar energy technologies, where economically or technically feasible?	N/A

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Section 223(a)

Will the A.I.D. guaranty fee be in an amount authorized by A.I.D. in accordance with its delegated powers? YES

Section 223(f)

Is the maximum rate of interest allowable to the eligible U.S. Investor, as prescribed by the Administrator, not more than one percent (1%) above the current rate of interest applicable to housing mortgages insured by the Department of Housing and Urban Development? N/A

Section 223(j)

1) Will the proposed Housing Guaranty be coordinated with and complementary to other development assistance in the host country? YES

2) Will the proposed Housing Guaranty demonstrate the feasibility of particular kinds of housing and other institutional arrangements? YES

3) Is the project designed and planned by A.I.D. so that at least ninety percent (90%) of the face value of the proposed guaranty will be for housing suitable for families below the median urban income for housing in urban areas, in the host country. YES

4) Will the issuance of this guaranty cause the face value of guaranties issued with respect to the host country exceed $25 million in any fiscal year? NO

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5) Will the issuance of this guaranty cause the average face value of all housing guaranties issued in this fiscal year to exceed $15 million? NO

Section 238(c)

Will the guaranty agreement provide that it will cover only lenders who are "eligible investors" within the meaning of this section of the statute at the time the guaranty is issued? YES

B. Criteria Under General Foreign Assistance Act Authority.

Section 620/620A

a) Does the host country meet the general criteria for country eligibility under the Foreign Assistance Act as set forth in the country eligibility checklist prepared at the beginning of each year? YES

b) Is there any reason to believe that circumstances have changed in the host country so that it would now be ineligible under the country statutory checklist? NO

F:\PHILIP\MFEIG, pbbt, November 4, 1992.

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ANNEX H

AID/W GUIDANCE: PP DELEGATION OF AUTHORITY

Municipal Finance for Environmental Infrastructure

UNCLASSIFIED STATE 241346

ACTION AID 3 INFO DCM ECON CHRON

VZCZCJAO118
PP RUEHJA
DE RUEHC #1346 2101320
ZNR UUUUU ZZH
P R 281320Z JUL 92
FM SECSTATE WASHDC
TO RUEHJA/AMEMBASSY JAKARTA PRIORITY 6216
INFO RUEHBK/AMEMBASSY BANGKOK 2808
BT
UNCLAS STATE 241346

LOC: 060 495
29 JUL 92 1322
CN: 19147
CHRG: AID
DIST: AID

RECEIVED JUL 29 1992 USAID/C&R Jakarta

ACTION COPY

ACTION COPY
DATE DUE 7/31
ACTION TAKEN
DATE 8/2/92
BY:
RETURN TO C & R

AIDAC JAKARTA FOR W. FREJ, BANGKOK FOR RHUDO

E.O. 12356: N/A

OFFICIAL FILE

TAGS:

SUBJECT: INDONESIA MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE PROGRAM (497-HG-006, A01)

1A. DECISION: IN RESPONSE TO A REQUEST FROM THE MISSION, THE INDONESIA MUNICIPAL FINANCE FOR ENVIRONMENTAL INFRASTRUCTURE PROGRAM (497-HG-006, A01) NEW PROJECT DESCRIPTION (NPD) WAS REVIEWED IN AID/W. THE CONCLUSION OF THE NPD REVIEW COMMITTEE WAS TO RECOMMEND THAT THE AA/ASIA DELEGATE PROGRAM AUTHORIZATION AUTHORITY TO THE INDONESIA MISSION DIRECTOR. PURSUANT TO DELEGATION OF AUTHORITY NO. 400, DATED AUGUST L6, 1991, AND INTERIM REORGANIZATION DOA NO. 9, PARA. A, DATED OCTOBER L, 1991, AA/ASIA HEREBY DELEGATES TO THE DIRECTOR, USAID/INDONESIA THIS AUTHORITY. TOTAL GUARANTY AUTHORITY FOR THIS PROGRAM IS LIMITED TO DOLS 125 MILLION, WITH AN ANNUAL AUTHORIZATION LIMIT OF DOLS 25 MILLION.

RECEIVED JUL 1992 USAID/PED Jakarta

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1B. DUE TO THE RECENTLY ENACTED CREDIT REFORM REGULATIONS, THE MISSION AUTHORIZATION LANGUAGE MUST BE CLEARED BY AID/FA/FM/LM PRIOR TO EACH ANNUAL AUTHORIZATION. SPECIFICALLY, AS REQUIRED BY CREDIT REFORM LEGISLATION, THE QUOTE SUBSIDY COST UNQUOTE OF THE GUARANTY AS CALCULATED BY AID/FA/B MUST BE EXPRESSLY IN EACH ANNUAL AUTHORIZATION AND MUST BE CLEARED BY AID/FA/FM/LM.

2. FOR INFORMATIONAL PURPOSE ONLY, PLEASE ADVISE ASIA BUREAU VIA CABLE OF ANY CONDITIONS PRECEDENT AND OF THE FINAL POLICY AGENDA AND PLANS FOR ITS IMPLEMENTATION WHEN AVAILABLE AFTER SIGNING.

3A. BUREAU REVIEW: THE NPD REVIEW WAS HELD ON THURSDAY APRIL 30, 1992. THE MEETING WAS CHAIRED BY ASIA/DR/PD AND WAS ATTENDED BY PRE/HI ASIA/FPM, ASIA/EA, GC/PRE, ASIA/DR/TR, POL/PAR, US-AEP AND THE MISSION HOUSING AND URBAN DEVELOPMENT OFFICER WHO MADE THE PRESENTATION. IN

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HIS OPENING REMARKS THE MISSION REP DESCRIBED THE EXISTING LIMITS ON INDONESIA'S ECONOMIC GROWTH DUE TO INFRASTRUCTURE CONSTRAINTS AND THE ECONOMIC RATIONALE FOR USING HOUSING GUARANTY (HG) RESOURCES.

3B. TOPICS DISCUSED: THE DISCUSSION FOCUSED PRIMARILY ON TH DIFFERENCES BETWEEN THE CURRENT HOUSING AND FINNCE AND SHELTER PROGRAM, THE PROPOSED PROGRAMAND RELATIONSHIPS WITH PROGRAMS SUCH AS PURSE,US-AEP AND THE THAI PARTNERSHIP PROJECT. OTHER TOPICS INCLUDED THE RATIONALE FOR HG INESTMENT IN INDONESIA, COUNTRY BORROWING CAPAITY POLICY ACHIEVEMENTS OBTAINED AND ANTICIATED, 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.

3C. INCLUSION OF GENDER SENSITIVE LANGUAGE: 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 PARTICIPANTS AND BENEFICIARIES. PROGRAM IMPACT INDICATORS SHOULD BE AT THE PEOPLE-LEVEL AND SHOULD ALLOW DISAGGREGATION BY GENDER, TO THE EXTENT POSSIBLE.

3D. ADDITIONAL PP PREPARATION GUIDANCE: A MORE WELL DEFINED STATEMENT OF THE PROBLEM SHOULD ILLUSTRATE THE PROBLEMS THAT THE SOLUTIONS INTEND TO SOLVE AND WHAT IT UNIQUELY MEANS TO INDONESIA. ALSO INCLUDE AN ELABORATION OF THE RELATIONSHIP BETWEEN THIS ACTIVITY AND THE MISSION'S STRATEGIC OBJECTIVES IN ORDER TO PLACE THE PROGRAM IN AN APPROPRIATE CONTEXT.

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ANNEX I

INITIAL ENVIRONMENTAL EXAMINATION

Municipal Finance for Environmental Infrastructure

INITIAL ENVIRONMENTAL EXAMINATION OR CATEGORICAL EXCLUSION

(A) PROGRAM COUNTRY: Indonesia

(B) ACTIVITY: Municipal Finance for Environmental Infrastructure (497-HG-006)

(C) FUNDING: $125 million Housing Guaranty Loan

(D) PERIOD OF FUNDING: FY 1993 - FY 1998

(E) STATEMENT PREPARED BY: William Frej, USAID/Indonesia

(F) ENVIRONMENTAL ACTION RECOMMENDED: Negative Determination

(G) ENVIRONMENTAL OFFICER CLEARANCE: Jerry Bisson, USAID/Indonesia

(H) DECISION OF ASIA BUREAU ENVIRONMENTAL OFFICER:

APPROVED: M. Lux, ASIA/DR/TR

DISAPPROVED:

DATE: Nov. 17 1992.

(I) DECISION OF USAID/INDONESIA DIRECTOR,

APPROVED:

DISAPPROVED:

DATE: 6/30/93

EXAMINATION OF THE NATURE, SCOPE AND MAGNITUDE OF THE ENVIRONMENTAL IMPACT:

A. DESCRIPTION OF THE PROGRAM:

The proposed program under HG-006 will provide a housing guaranty loan in the amount of $125 million to the GOI for the purpose of stimulating policy reforms aimed at improving the country's system of municipal financing of environmental infrastructure.

There are two types of activities promoted through this program:

1) Capital finance provided by the GOI for priority shelter-related urban environmental investments, and

2) Policy reforms aimed at improving the country's system of municipal financing of environmental infrastructure.

Capital Finance Provided by the GOI

The first category of these activities is capital finance provided by the GOI for urban environmental investments. The GOI will agree to finance rupiah expenditures on a jointly agreed Investment Program of shelter-related environmental infrastructure for the urban poor in an amount equivalent to the loans guarantied under the A.I.D. Housing Guaranty Program

While A.I.D. will not directly select, design, locate or fund individual projects under HG-006, it will assure that all rupiah-financed projects attributed to this program by the GOI are in full compliance with the GOI's Environmental Impact Assessment (EIA) process, known as AMDAL. This process is similar to the U.S. EIA procedure in that an initial IEE is performed of all government-funded construction activities and that all such activities found to pose a potentially significant threat to the environment are then required to have a full EIA prior to beginning construction.

Finally, since USAID/Indonesia considers the preparation of an EIA as an integral part of the project planning process and as it seeks to encourage adoption of environmental reviews at the earliest practical stage, it therefore proposes to include expenditures on the preparation of EIAs and the monitoring and evaluation of compliance with those assessments as a category of eligible expenditure under HG-006.

Policy Reform

The second category of activities, policy reforms aimed at improving municipal financing of environmental infrastructure, are normally categorically excluded from further environmental review in accordance with Section 216.2(c)(1) (i) and (ii).

However, certain economic policies can have serious environmental consequences. Policy reforms intended to further urban environmental quality management and the provision of urban environmental infrastructure are an integral part of the Policy Action Plan. For this reason, the proposed project design for HG-006 has been carefully reviewed to identify any proposed activity in which waste generation or water use might be subsidized and thereby lead to adverse environmental consequences. In addition, the Mission intends to monitor the Program's policy reforms in relation to environmental impacts.

This review concluded that HG-006 places a very high priority on monitoring and enforcement for all environmental infrastructure, as well as monitoring of its requisite policy reforms.

B. RECOMMENDATION:

It is recommended that the proposed program receive a Negative Determination. Potential environmental impacts of investments funded under this urban infrastructure sector loan will be assessed through the GOI's environmental impact assessment process and monitoring and mitigation will be provided by the GOI as necessary. The Mission will monitor compliance with this provision through its annual monitoring of investments made by the GOI under this Program's Investment Plan. These annual reports will be provided to the Mission's Environmental Officer.

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ANNEX J

GOI REQUEST FOR ASSISTANCE

Municipal Finance for Environmental Infrastructure

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GSO		
C & R		

REPUBLIC OF INDONESIA
NATIONAL DEVELOPMENT PLANNING AGENCY
JAKARTA, INDONESIA

Ref. no.: 129 /D.V/3/1992

March 14, 1992

RECEIVED
MAR 18 1992
USAID/C&R
Jakarta

Mr. Lee Twentyman
Acting Director, USAID
C/o U.S. Embassy
Medan Merdeka Selatan 3
Jakarta

RE: DISBURSEMENT OF THE FOURTH TRANCHE OF THE GOVERNMENT OF THE INDONESIA-UNITED STATES OF AMERICA HOUSING GUARANTEE LOAN (HGL) (A.I.D. LOAN NO. 497-HGL-001) AND PLANNING FOR SECOND HOUSING GUARANTEE LOAN

Dear Mr. Twentyman

This letter and the enclosed memorandum on Progress and Issues in Indonesia's Urban Development and Priorities for Policy Analysis, Strategy Formulation and Programming, are in response to your letter dated 14 January 1992 to the State Minister for National Development Planning/Chairman BAPPENAS, Professor Saleh Afiff, on the subject of the information needed for the disbursement of the fourth tranche of the Government of Indonesia - United States of America Housing Guarantee Loan (HGL) (A.I.D. Loan No. 497-HGL-001). He has asked me to reply on his behalf.

We believe that the progress in the urban sector during the past year, which is analyzed in the enclosed Memorandum, underscores the effectiveness of the use of the first three tranches and the importance of proceeding with the fourth tranche now.

We feel also that this is an appropriate time to analyze progress with the HGL, and discussions of the possibility of a second HGL, in the context of our overall agenda for the development of urban policy and strategy and the ongoing preparation and implementation of our urban programme. For this reason, Part II of the enclosed Memorandum has a broader perspective than the analogous Part II of last year's memorandum on the HGL. It is intended to provide an outline of current and proposed activities, and a framework for focussing and coordinating both our own resources and external assistance -- including, we hope, a second Housing Guarantee Loan.

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With this in mind, we look forward to discussing proposals for a second HGL with you and your staff. Because of the importance of ensuring that assistance through USAID and other sources is planned and coordinated in the context of our overall strategy, it will be appropriate for future discussions of both the existing and prospective Housing Guarantee Loans to be held with Deputy V, BAPPENAS. We can arrange for the participation of the other relevant government agencies.

We would welcome your comments on the enclosed Memorandum and hope that we can meet shortly to discuss in some detail the possibility of a second Housing Guarantee Loan. We would appreciate receiving a copy of any independent evaluation of the HGL work undertaken by USAID.

We will be pleased to provide additional information you may need, and look forward to the disbursement of the fourth tranche of the existing Loan.

Yours sincerely,

BADAN PERENCANAAN PEMBANGUNAN NASIONAL

Sugijanto Soegijoko
Deputy V, Bidang Regional dan Daerah
BAPPENAS
Chairman, Tim Koordinasi Pembangunan Perkotaan (TKPP)

cc. Mr. William M. Frej
Chief, Urban Policy Division
Private Enterprise Development Office
USAID

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497-HG-006

DEPARTEMEN PEKERJAAN UMUM
DIREKTORAT JENDERAL CIPTA KARYA
Jl. R. Patah I No. 1 Telp. 717240-7397727-7397789 Telex: 47330 DJCK. IA Kotak Pos: 4059 Jakarta 12040

NO : HL. 01.01-DC/930

USAID ROUTING
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RECEIVED SEP 2 1992 USAID/CAR Jakarta

Mr. William M. Frej
Chief, Urban Policy Division
Office of Private Enterprise Development
USAID
American Embassy
Jakarta

26 August 1992

WORKING COPY

Dear Bill Frej :

Over two months ago, we had an excellent meeting in my office, in which we brought each other up to date. On the GOI/Cipta Karya side, we informed you of some of our new thinking regarding "sustainable urban development management" and of our emerging program to recast Cipta Karya's role to support local governments through technical assistance and training. On your side, you discussed USAID's evaluation of the Municipal Finance Project and HG Loan 1, and the proposal to design a new HG Loan 2 for Repelita VI.

With this letter, I would like to express broad support for your proposal to assist the GOI in the urban sector with a new HG Loan 2. I realize that you will be appropriately opening the discussions on this important assistance through Bappenas, and - at the proper time - will subsequently be wanting to meet with myself and my staff as well. Whenever it is convenient, we welcome the opportunity to share with you our ideas regarding some possible areas of support under HG Loan 2.

I believe that there are in fact several shared goals between USAID and DG Cipta Karya in the urban sector, which can provide the initial basis for cooperation on HG Loan 2. These shared goals include :

(1) Promote and further refine a common view of the overall urban development management system ;

(2) Shift primary responsibility for planning and implementing urban development investments to local government and to the private sector;

(3) Promote public-private partnerships both in environmental infrastructure development and also in integrated "area development packages";

(4) Place renewed emphasis on integration (including institutional cooperation) and new emphasis on sustainability in all respects.

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Please accept this letter in the spirit of general support to USAID's continued assistance in the urban field. We have appreciated your help in the past, and can certainly use (and will appreciate) it in the future.

Sincerely yours,

Director General of Cipta Karya

DEPARTEMEN PEKERJAAN UMUM
DIREKTORAT JENDERAL CIPTA KARYA

Rachmadi B.S.
NIP 110008693

Copies to :
1. Minister of Public Works
2. Deputy V Bappenas

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