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Urban Infrastructure and the Urban Poor

Measurement and Analysis for Policy, Planning, and Project Implementation

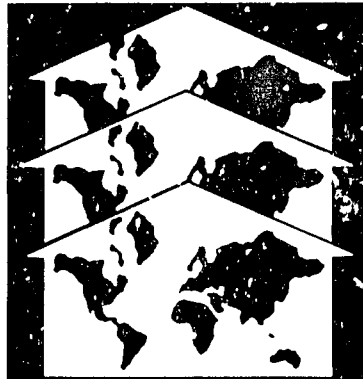
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Urban Infrastructure and the Urban Poor:

Measurement and Analysis for Policy, Planning, and Project Implementation

January, 1993

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For the:

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ABSTRACT

With USAID assistance, the Government of Indonesia (GOI) has been engaged in a concerted effort to improve living standards in her cities and towns through the provision of basic urban infrastructure and services as well as to increase Local Government capabilities to plan, finance and manage appropriately designed infrastructure within their respective jurisdictions. The overall effort is guided by a GOI sanctioned Urban Policy Action Plan (PAP) and is currently being implemented under a national Integrated Urban Infrastructure Development Program (IUIDP). A major concern of USAID and GOI relates to the degree that expenditure is benefitting those most in need, in particular the urban poor and women (who are recognized for their special role as family health providers and thus as important target beneficiaries in their own right). In response to these concerns, USAID has commissioned the work contained in this report which is aimed at "determining the feasibility of undertaking a household survey or series of surveys to determine the incidence of benefits, by income group and by gender, of the various programs in urban infrastructure."

Based on a review of the overall policy and program environment, the report sets out a series of methodological options, including both secondary analysis of existing census and survey data as well as new primary data collection. In doing this, it attempts to emphasize the need to carefully define objectives and the ways in which different objectives can imply substantially different study designs. It also emphasizes the need to focus on systems which are not only analytically sound, but which have the potential to offer useful information to planners and managers at all levels of Government.

EDITORIAL NOTE

Since the original paper included material unsuitable for general publication (including, for instance, estimated costing of proposed follow-up studies, and specific references to USAID/Indonesia urban programs), certain material has been deleted from the original for the purpose of publication. The order of the text, originally written in accordance with requirements of the Scope of Work, has also been reorganized for presentational purposes.

ACKNOWLEDGEMENTS

We would like to thank the USAID Mission Jakarta Office for giving **Insan Harapan Sejahtera** the opportunity to prepare a report on the feasibility of undertaking a sample survey of beneficiaries of urban infrastructure investment programs. This has resulted in the following paper entitled **URBAN INFRASTRUCTURE AND THE URBAN POOR: MEASUREMENT AND ANALYSIS FOR POLICY, PLANNING AND PROJECT IMPLEMENTATION**.

In particular we would like to thank Mr. Michael Lee, Urban Policy Advisor of the Office of Private Enterprise Development, Mr. William M. Frej, Chief, Urban Policy Division, Office of Private Enterprise Development, and Mr. Timothy Alexander also of the Urban Policy Division, Office of Private Enterprise Development, who share the responsibility for this project. We thank these gentlemen for providing us with information on USAID's position on relevant issues to this project as well as their valuable comments during a preliminary presentation at USAID.

We further extend our thanks to Ms. Nancy Langworthy for forwarding to us information on AID's policy statement on women in development. Mr. John Taylor of the Municipal Finance Project at DTKTD, DG Human Settlements of the Ministry of Public Works, who introduced us to Pak Djoko of Bina Program of the DG Human Settlements of the Ministry of Public Works. During that meeting we learned about the practically nation-wide system of reporting procedures and outcomes, including PJMs, under the umbrella framework of IUIDP. This is a remarkable and noteworthy achievement by this office which introduced the program only a few years ago.

While most of the information to prepare this report do not originate with us, all analyses, conclusions and recommendations are our own. If there is any merit in this report we share it with all those who contributed to this work but any shortcomings are our own responsibility.

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INSAN HARAPAN SEJAHTERA
Jakarta, January 1993

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EXECUTIVE SUMMARY

1. Social welfare and equity objectives form a fundamental part of the broad policy framework guiding development in Indonesia. This is true at the most global policy levels reflected in the 'Development Trilogy' of growth, equity and security and in the quinquennial *GBHN (Garis Besar Hulan Negara)* which provide a, largely normative and equity driven, policy base for the various sectoral Five-Year Development Plans or *Repelita*. It is also reflected in sectoral guidelines across a wide range of government departments and, perhaps more important, in views of local officials in many areas who frequently see social and economic divisions within the community as a major threat to political security and long term sustainable development.
2. In order to look more closely at gender and equity concerns in the GOI urban sector expenditure program for which USAID is providing support, the agency has decided to commission the work which forms the basis of this report; the purpose, as noted in the Scope of Work, being "to assist USAID/Indonesia in determining the feasibility of undertaking a household survey or series of surveys to determine the incidence of benefits, by income group and by gender, among the beneficiaries of the various investment programs in urban infrastructure." In particular, given the "goals of GOI, supported by USAID, to target benefits to lower income households;" and given the interest of USAID "that its programs should benefit women to the greatest degree feasible," such design efforts should address specifically:
 - (a) How information on the incidence of benefits might be obtained in the most cost effective manner, and
 - (b) How that information might be used to redirect programs to match the GOI's poverty alleviation goals and to support women in development.

Finally, the Scope of Work limits the analysis to the specific sectors of urban clean water supply, sanitation, drainage, waste management and roads.

3. The report looks at gender issues and notes their importance in a range of policy and program context, particularly in programs aimed largely at the provision of environmental infrastructure services impinging on family health conditions for which women have a strong widely recognized responsibility. For the simple reason that equity based policies and targets seldom explicitly include gender specific goals, it is important to include at least some reflection on gender considerations in any attempt to define specific objectives for research or monitoring activity.
4. While the significant role women play in relation to infrastructure utilization in Indonesia is undeniable, our conclusion is that the major problem faced by these women is ultimately still one of poverty and limited access to safe services in the same way as for men. In this sense, and in the context of this report, we feel that the equity at the household or family level in the provision of public urban infrastructure

should, as is more or less currently the case, remain the primary objective in program design. Even so, key women's issues can still be addressed in terms at the level of the individual project (e.g. in terms of design, implementation and management) and focus on the need to sensitize such things as location of infrastructure, as well as management and operations, to the roles and needs of women in poor households. More important to this report, it means that methodologies aimed at measuring conditions or beneficiary impact among poor households can also be used to measure conditions among poor women. The key remains that, within an overall or project-defined universe of poor or non-poor households, household surveys or other research instruments should be addressed to women as well as to men, and analysis carried out on a gender-specific basis in order to assess any differential impact/benefit on women and the degree to which projects meet needs of poor women in terms of both their familial and economic roles.

5. Regarding broader poverty issues in development expenditure planning and implementation, the report notes that to establish a sound methodological framework for investigating issues of equity and impact of programs on the poor, it is necessary to distinguish between two questions: namely (1) *Are the urban poor being served?*, and (2) *Are urban services benefitting the poor?* It should be clear that both of these questions are important. Yet, it should also be emphasized at the outset that there is a tendency to confuse the rather distinct methodological and analytical implications inherent in them. In simplest terms the first is a question of distributional equity (and changes in equity) in overall access to services; the second is a question of the efficacy of program and project implementation and the results of that implementation measured from a perspective of the degree to which intended beneficiaries are actually making use (benefitting) from the services involved. The measurement base for the first question is logically the universe of population/households (either poor or total) at the level of aggregation (e.g. national, regional) deemed most appropriate for the particular analysis. The measurement base for the latter is the universe defined by a set of sectoral programs or projects implemented over a given period of time.
6. It is suggested that the main objective of answering the question: "*Are the urban poor being served?*" is to assist policy formulation, program targeting and formulation of models/approaches for more equitable allocation of available resources by measuring changes in the distribution of access to services (in terms, for example, of region, city size class, sector and income class) over time. Compiling and analyzing data on levels and trends in access to services would provide a more solid basis for program management and for recommending changes in data collection procedures and organization that would provide more effective indicators of performance. The simple fact remains that there is already a wealth of data available, much of which has not been utilized to a maximum extent and, further, that modifications or adjustments to existing data collection structures could well prove to be more effective in supporting improved policy formulation and sectoral programming than consideration of major new data collection efforts. For USAID, the recognition that improved targeting of

expenditure will itself be a source of justification for the poverty alleviation aims of the program should be sufficient reason for interest in this side of the picture.

7. There are a number of options in relation to information system development, data collection and analysis. These include (a) possibilities for extended analysis, including possible additional processing of data from the 1990 decennial Population Censuses, (b) an effort to maximize the analysis of data from *SUSENAS*, the annual series of National Social and Economic Surveys and, in particular use of the results of the 1992 *SUSENAS* which includes a detailed module on housing and environmental conditions, (c) possibilities for implementing a distinct new National Urban Housing Survey following on work carried out at a smaller scale under the 1988 Urban Housing Study and (d) efforts to improve the coverage and quality of local social and economic data and to develop and institutionalize tools and systems for incorporation of appropriate forms of gender and poverty analysis in local urban infrastructure planning and programming.
8. If the question to be answered is *Are urban services benefitting the poor?* then it is suggested to consider a series of initiatives which could support both improved design and evaluation of the expenditure program in ways which could simultaneously support GOI objectives as well as the needs of USAID. Here it is suggested to focus on two interrelated components. The first part is a program and project evaluation study which would utilize existing information contained in local plans and expenditure programs and in Sectoral Expenditure (Budget) data now maintained by the Ministry of Public Works as part of the annual budgeting process. The role of this type of study would be to provide a setting or context for the second component, a *Survey of Project Beneficiaries*. The results of the survey could then be related back to overall program and project wish lists, plans and expenditure patterns.
9. Analysis of existing expenditure patterns by sector, location, type of expenditure and source of funding is necessary background work to development of an appropriate contextual and analytical frame for design of a beneficiary survey. We also feel, however, that this material (which is presently contained in a series of very thick and unwieldy provincial volumes) could be synthesized and presented in ways that would be useful for management information purposes and which could compliment work already undertaken on development of, mainly financial, monitoring indicators for the Urban Policy Action Plan.
10. It is also emphasized that design of a suitable survey of project beneficiaries is likely to be a complex task. There are a number of technical and methodological concerns which need to be resolved, not the least of which is simply how to identify beneficiaries for projects which are community or area based and are not explicitly tied to individual households, or to distinguish, in a reasonably rigorous sample frame, intended beneficiaries - in terms of project objectives - from those actually making use of the various services being provided. There will probably need to be a

fairly high 'pilot' content in any initial survey work, allowing for testing of a variety of field procedures both from the point of view of cost and efficiency and from the point of view of the content validity of the information collected.

11. Broad policy considerations would suggest a need to be able to analyze conditions and differences in terms of region, city size class and sector. Even though most guidelines and procedures for program and project design are national in scope, some ability to be able to isolate broad regional performance characteristics would likely be necessary to support broader regional development objectives. City size class is also relevant for expenditure policy. Finally, any sample must be stratified by sector. This is both because there are clear expected variations in the share of expenditure going to the poor across different sectors and because subsequent approaches to beneficiary identification depend very strongly on the type of infrastructure being provided.
12. This, however, solves only part of the problem. There are two additional dimensions which need to be considered in detailing an appropriate study design. The first is funding source and the second the degree to which project specifications permit or do not permit clear identification of beneficiaries. Regarding funding sources, while there is reason to be concerned about equity of the overall expenditure program, particular questions should be asked about who is benefiting from grant components.
13. Beneficiary identification is also an issue. For example, beneficiaries of piped water supply at the household or individual level under programs run by the Directorate of Clean Water Supply of the Ministry of Public Works can only be clearly identified where expenditure is on actual distribution (house connections, standpipes, etc.). Where expenditure relates to higher level facilities (production, transmission) trying to identify beneficiaries at this level may not be very meaningful. Similar issues are involved in beneficiary definition for programs run by the Environmental Sanitation Division, although less so for those run by the Directorate of Housing such as the Kampung Improvement Programs, *KIP*, which have a strong area development focus.
14. Once projects have been selected (particularly grant funded projects where beneficiaries can, in principle, be identified), appropriate area samples (household level) can be taken to assess incidence of benefit by income class. Research instruments should pay attention to the following types of questions:
 - Who are the intended beneficiaries? - defined, insofar as possible, in terms of project scope and location; in effect, in terms of the intended service areas.
 - What is the income distribution of intended beneficiaries? - is the area predominantly poor, middle class or rich? what is the share of population below the median-income level (as externally defined on a regional or national basis)?

- **Who, among the intended beneficiaries, is actually utilizing or benefiting from the project?**
- **What is the income distribution of actual beneficiaries?**
- **How are beneficiaries actually benefitting from the new infrastructure or services? - for example, are they receiving better service at less cost than non-beneficiaries? and**
- **What are the key issues and solutions to improving service delivery to the poor? Do they, for example, lie in problems with initial targeting, in problems with relating infrastructure to perceived needs and demands at both household and community levels, or in problems with incentive, skill or administrative structures within the service agencies involved?**

1. INTRODUCTION

Social welfare and equity objectives form a fundamental part of the broad policy framework guiding development in Indonesia. This is true at the most global policy levels reflected in the 'Development Trilogy' of growth, equity and security and in the quinquennial *GBHN* (*Garis Besar Hulan Negara*) which provide a, largely normative and equity driven, policy base for the various sectoral Five-Year Development Plans or *Repelita*. It is also reflected in sectoral guidelines across a wide range of government departments and, perhaps more important, in views of local officials in many areas who frequently see social and economic divisions within the community as a major threat to political security and long term sustainable development.

Even so, questions are often raised regarding the degree to which implementation actually reflects these goals. At one level this can be seen in questions about the degree to which the poor are or are not being reached by services; reflected, for example, in comments on deteriorating conditions in areas inhabited by the urban poor or on widening socio-economic gaps either interregionally or between rural and urban areas. At another level this can be seen in questions about who benefits from specific sectoral projects and programs, even where, at least in theory, there are distributional objectives inherent in the guidelines and plans.

Both of these levels of questioning are reflected, among others, in the recent Interim Evaluation of the Municipal Finance Project, which queried both the equity of expenditure patterns in terms of the regional and city size class distribution of the low income population, and the representation of low income population as actual beneficiaries of sectoral expenditure programs. Most important, it stressed the current inability to reach firm conclusions on these matters, citing, in particular, the singular "dearth of information regarding the degree of poverty targeting of current sector programs."

The present paper therefore addresses the questions:

- (a) How information on the incidence of benefits might be obtained in the most cost effective manner, and
- (b) How that information might be used to redirect programs to match the GOI's poverty alleviation goals.

One addendum to the paper addresses policy formulation and planning issues with regard to the questions of benefit targetting.

A second addendum looks at gender issues and notes their importance in a range of policy and program context, particularly in programs aimed largely at the provision of

environmental infrastructure services impinging on family health conditions for which women have a strong widely recognized responsibility. For the simple reason that equity based policies and targets seldom explicitly include gender specific goals, it is important to include at least some reflection on gender considerations in any attempt to define specific objectives for research or monitoring activity.

While the significant role women play in relation to infrastructure utilization in Indonesia is undeniable, a conclusion is that the major problem faced by these women is ultimately still one of poverty and limited access to safe services in the same way as for men. In this sense, the analysis finds that equity at the household or family level in the provision of public urban infrastructure should, as is more or less currently the case, remain the primary objective in program design. Even so, key women's issues can still be addressed in terms at the level of the individual project (e.g. in terms of design, implementation and management) and focus on the need to sensitize such things as location of infrastructure, as well as management and operations, to the roles and needs of women in poor households. More important to this paper it means that methodologies aimed at measuring conditions or beneficiary impact among poor households can also be used to measure conditions among poor women. The key remains that, within an overall or project-defined universe of poor or non-poor households, household surveys or other research instruments should be addressed to women as well as to men, and analysis carried out on a gender-specific basis in order to assess any differential impact/benefit on women and the degree to which projects meet needs of poor women in terms of both their familial and economic roles.

2. ARE THE URBAN POOR BEING SERVED? ARE URBAN SERVICES BENEFITING THE POOR?

2.1 The Key Questions¹

In order to establish a sound methodological framework for investigating issues of equity and impact of programs on the poor, there is a need to distinguish between two questions:

- are the urban poor being served? and
- are urban services benefitting the poor?

It should be clear that both of these questions are important. Yet, it should also be emphasized at the outset that there is a tendency to confuse the rather distinct methodological and analytical implications inherent in them. In simplest terms the first is a question of distributional equity (and changes in equity) in overall access to services; the second is a question of the efficacy of program and project implementation and the results of that implementation measured from a perspective of the degree to which intended beneficiaries are actually making use (benefitting) from the services involved. The measurement base for the first question is logically the universe of population/households (either poor or total) at the level of aggregation (e.g. national, regional) deemed most appropriate for the particular analysis. The measurement base for the latter is the universe defined by a set of sectoral programs or projects implemented over a given period of time.

2.2 Are the Urban Poor Being Served: Options for Data Collection and Analysis

The main objective here is to assist policy formulation, program targeting and formulation of models/approaches for more equitable allocation of available resources, by measuring

¹On poverty, due in part, perhaps, to the more diverse and fragmented nature of programs, there is a singular lack of virtually any comprehensive study on policies and programs throughout government. A few general articles can be cited, including Firdausy C. and C. Tisdell, (1989), *Indonesian Economic Development Plans, Achievements and Policies for Alleviating Poverty and Income Inequality*, *Asian Journal of Economics and Social Studies*, 8 (2), pp. 107-120, and, with a focus on rural areas, Tjondronegoro, S.M.P., I. Soejono and J. Hardjono, (1992), *Rural Poverty in Indonesia: Trends, Issues and Policies*, *Asian Development Review*, 10 (1), pp. 66-90. A more focussed discussion dealing with one urban area, Jakarta, is contained in Papilaya, Alex, et. al., (n.d.), *The Jakarta Urban Poor: An Assessment of its Profile, Policies and Program*, Jakarta, Center for Child Survival, University of Indonesia and Bureau of Planning (Health Project III), Department of Health. Finally, the 1990 World Bank poverty report, *Indonesia: Strategy for Sustained Reduction in Poverty*, Washington DC, contains a full chapter on poverty alleviation issues in water supply, sanitation, KIP and housing sectors in urban areas.

changes in the distribution of access to services (in terms, for example, of region, city size class, sector and income class) over time. Compiling and analyzing data on levels and trends in access to services would provide a more solid basis for program management and for recommending changes in data collection procedures and organization (primarily from national censuses and surveys) that would provide more effective indicators of performance.

At this level, there are a number of options in relation to information system development, data collection and analysis. There is already a wealth of data available, much of which has not been utilized to a maximum extent and, further, that modifications or adjustments to existing data collection structures could well prove to be more effective in supporting improved policy formulation and sectoral programming than consideration of major new data collection efforts.

There are a range of possible options which bear additional scrutiny; among these including:

- a. Extending analysis of the 1990 decennial population census to more effectively utilize existing information on housing characteristics,
- b. Supporting efforts to develop *Susenas* (particularly under its new format) into the main vehicle for measuring access to key social and environmental services by income/expenditure group and including support of detailed analysis of the 1992 *Susenas*,
- c. Implementing a new National Housing Survey (e.g. following on the National Housing Survey conducted in 1988), and
- d. Improving local statistical data on social and economic characteristics.

Each of these are discussed in greater detail below.

2.2.1 Decennial Population Census

The five percent national sample of the decennial Census of Population and Housing already includes a limited number of questions on housing conditions and access to a selected range of services (e.g. source of drinking water, source of washing/bathing water, type of human waste disposal, etc.). The main advantage of the census lies in the size of the sample (over 2 million households nationally in 1990) which permits reasonably reliable simple (one-way) tabulations of basic population and household characteristics at *Tingkat II* (*katupaten/kotamadya*) level (at least to the level of individual *Tingkat II* on Java and for groups of *Tingkat II* outside Java). Other, more frequent, national surveys (notably *Susenas*) are based on much smaller samples and generally allow tabulations at province level at best.²

²For 1993, a larger *Susenas* sample will permit *Tingkat II* level tabulations for items contained in the core questionnaire. As discussed in greater detail below, this will include a

The main problems have to do with frequency (the census is carried out only once every 10 years) and with the lack of specific information on household income. Because of the high cost of census operations and the difficulties of asking even remotely reliable income questions on such a large sample, attempts to increase frequency or include direct income information are not likely to be financially or methodologically feasible.

Even so, the census provides a singularly rich source of information which has yet to be fully exploited by analysts and policy makers. Its potential is particularly underrated as a vehicle for providing indicators of longer term regional patterns of change which can be used at a policy level to target specific areas where service levels are low or where poverty related indicators (e.g. poorer health conditions, lower educational levels) indicate relatively greater levels of need.

Specific initiatives could include:

- a. Relatively small analytical efforts using existing data and with an aim of synthesizing relevant material in ways that will educate and inform decision makers. Mapping of levels and dynamics in key household variables, perhaps down to *kabupaten* level; other forms of analysis of regional social and economic dynamics (e.g. using PQLI³ type measures) with policy or targeting implications could be of benefit here.
- b. More complex studies which would require adjustments to data processing and tabulation programs and which would organize output in a more user-friendly and user-relevant fashion. In particular, such efforts could include:
 - Organization (and recoding) of records to produce tabulations according to 'size of place' for cities and towns in Indonesia. This could lead to objective measures of conditions and service levels not only according to administrative unit, but also according to functional categories of city size.
 - Linkage of household and individual data (e.g. on educational attainment of head of household) which would allow comparison of housing and service characteristics by proxies for socio-economic class. A useful example of this type of exercise is represented in the Ford supported work on Women Headed Households carried out based on 1980 Census data.

limited number of questions (9 in all) on housing characteristics.

³The PQLI or Physical Quality of Life Index is a composite measure based on levels of infant mortality and of female literacy or education.

- c. Technical Assistance could also be considered to recommend minor changes in some of the household questions and response categories which would provide information more directly tailored to needs of sectoral planners and administrators.⁴ This latter item is obviously not relevant to the 1990 Census, but given existing levels of ambiguity in the way a number of the current questions are phrased, efforts in this area could benefit not only census operations, but also other surveys where household or housing data are being collected.⁵

Particularly for activities under item (b), and as with the *Susenas* data discussed below, a major cost item is in accessing raw data, either through cooperative arrangements with *BPS* or in purchasing tapes for processing by outside agencies. There are also legal and bureaucratic aspects in accessing data which are not insignificant for the institutions and/or researchers involved. There are a number of past and ongoing efforts to improve cooperation in this area, including some of the work of the MFP, but constraints still remain and the costs are real and are often difficult to internalize within existing GOI departmental budgeting structures. Supporting data acquisition and/or data processing costs may thus be an additional area (besides direct TA or support of focused research projects) where donor assistance could promote more extensive application of the census data.

2.2.2 Susenas

The National Social and Economic Survey (*Susenas*) is now being conducted on an annual basis covering a sample of roughly 65,000 households. The survey includes a standard core questionnaire covering a limited number of population and household characteristics along with a more detailed investigation of household expenditure patterns. To this are appended modules, which vary from survey to survey, covering specific topics of interest.

Susenas provides the main basis for national and regional calculation of income-related measures, including poverty, using expenditure as a proxy.⁶ Its main deficiency lies in the

⁴Some discussion of possible modifications occurred during the sectoral studies carried out under the First World Bank Urban Sector Loan (USL I). However, due to general lack of interest, this was not implemented to the extent of formal recommendations for inclusion in the 1990 Census.

⁵Evidence of useful change is already evident in the questions being asked in the 1992 *Susenas*; use of electricity for lighting is divided into *PLN* and non-*PLN* sources, and the question on source of drinking water is now preceded by one which asks if the source is private, shared or public and followed by one (for pump and well water) on the distance from the nearest source of human waste disposal.

⁶The 1992 *Susenas* included substantial revision of the core questionnaire designed both to simplify collection and improve the overall reliability of the expenditure data.

small sample size which means that variations can generally be assessed only at the broad regional level (e.g. provinces on Java, islands outside Java).⁷

Even so, the greater frequency of *Susenas* clearly enhances its value as a monitoring tool. The more intensive nature of this survey also means that modules can be more detailed than in a very large scale operation such as the census. Of greatest interest is the fact that the 1992 survey included a housing and environment module which, in turn, included questions on access to infrastructure (expanding on the types of questions asked in the census).⁸ There is considerable scope for analysis here, including both analysis of the housing data in the core questionnaire and in the housing module itself cross-classified by income (expenditure) group, and analysis of service levels to the poor nationally and by region cross-classified by the spatial distribution of expenditure (obtained from budget sources) both globally and by source of funds. Encouragement and possible support of secondary data analysis which contains a strong regional perspective could be particularly helpful to efforts aimed at making more informed policies for targeting of resources in ways that best promote equity objectives and support poverty alleviation goals.

A program of more intensive secondary analysis could reap rewards. For example, it may be that statements made about regional equity, or the lack of it, in terms of urban investment programs and in terms of various funding sources, may not have as solid a base in empirical analysis as one might wish. Is DKI Jakarta over-funded? Possibly, but what about rapid urbanization on the periphery in the province of West Java? What about other large cities on Java and elsewhere? Work under the INUDS Project to produce an Investment Allocation Framework for *Repelita V* suggested, for example that urban West Java (which includes the urban fringe of DKI Jakarta as well as the large city of Bandung) was one of the most relatively under-funded areas in the country.

In particular there is a need to:

⁷It is understood that the 1993 *Susenas* will cover a considerably larger sample, of more than 200,000 households. This would place the data collection effort on a par with that of the Intercensal Population Survey (*Supas*) conducted by *BPS* in 1985 and would dramatically increase the ability to break estimates down regionally, at a minimum by rural and urban areas within provinces and, at least in some cases, down to *kabupaten/kotamadya* level.

⁸Current plans are to establish a three-year cycle of modules. Thus the housing and environment module would be repeated in 1995, 1998 and so on. Only the core questionnaire, however, will utilize the larger (200,000 plus) household sample. Sample size for the modules will remain more or less at current (1992) levels and will thus remain amendable to analysis only at the regional or, in some cases, province level.

- a. Carry out extensive cross-sectional analysis of housing data by income/expenditure group and by region (re the valuable work carried out in the 1988 by the Urban Institute and PT Hasfarm Dian Konsultan as part of the Urban Housing Study). Efforts to organize the urban sample according to city size class and, in particular, efforts to relate this analysis to actual expenditure patterns (most notably grant components of expenditure) could also have significant relevance for policy.
- b. Attempt (as far as data permit) analysis of cost structures (based on the expenditure data) and the types or standards of services being received by households. Some of the RAND's work on costs and benefits in the health sector which made extensive use of *Susenas* data is a useful reference here.⁹

The 1992 *Susenas*, with its improved core questionnaire and housing module could prove to be one of the most valuable sources of information for the first half of the 1990s.

2.2.3 New Urban Housing Survey

Besides the *Susenas* mechanism there is also the potential to implement a separate survey of urban housing conditions in Indonesia. The work of the 1988 Urban Housing Study cited earlier has been widely quoted (see, for example, the World Bank strategy paper on poverty alleviation) in part because it is the only source for the latter part of the 1980s (and early 1990s up to the recent *Susenas*) which permits direct linkage of income/expenditure levels with access to urban services.

A distinct survey could offer some advantages, among them the ability to tailor the sample design more specifically to urban sector needs (focussing on urban areas, including city size classes as a distinct sample criteria) and the ability to go into greater detail in housing questions, for example to obtain information on gender-related issues or on linkages of specific technologies, costs and demand. On the other hand, costs of such an effort would be high (probably into the billions of rupiah) and it is not clear how high a priority would be assigned to this by GOI who would, in any case, have to bear most of the cost. As well, the expansion of the *Susenas* sample in 1993 to more than 200,000 households (about 0.5 percent of the national total) will mean that the urban sample will also be much larger and amenable to a wider variety of forms of tabulation and analysis. With this in mind, a more logical (cost-effective) option may be to ensure that a housing module is periodically included in *Susenas* (e.g. every 3 to 5 years) and that efforts are made to support methodological work

⁹Efforts here are likely to be limited as the revised (1992) expenditure schedule provides only one cell for all housing related expenditure and including such things as rent and costs of house maintenance as well as expenditures on services such as electricity, water, garbage collection and so on.

to strengthen such a module to address specific issues in urban sector policy formulation and programming.

In fact, as noted earlier, plans are already in place to include a housing and environment module in *Susenas* every three years. The main weakness lies in the fact that the expanded sample size (starting in 1993) will be limited to the core questionnaire. An obvious, and likely more cost effective, possibility would be to consider supplementary funding to augment the urban sample for the housing module to include all households covered by the expanded sample for the core.

2.2.4 Improvement of Local Social and Economic Data

The IUIDP process is built around a Local Government (*Tingkat I*) planning system under which priorities are established and expenditure programs derived locally for submission to higher levels of Government through the *PJM* process. Most important, where local plans have been prepared, it is now GOI (*Cipta Karya*) policy to utilize these expenditure programs as a basis for establishing annual time slices for implementation through the regular budgeting process. In short, within such a bottom-up system, confidence in the equity of the entire expenditure program will increasingly depend on confidence in the equity (poverty-directedness) of the individual expenditure programs prepared by the Local Governments involved. Improving the information base and hence the ability at this level to make more informed decisions on the targeting and nature of expenditure is clearly critical to this process.

This was noted in the 1990 Municipal Finance Seminar. Although the focus was on financial planning and management systems, there was a clear desire on the part of virtually all Local Government participants to develop and make more effective use of social information as a planning and monitoring tool and to strengthen relations with organizations (particularly local statistical offices - *Kantor Statistik*), in the provision of requisite data and information.

There have been a number of efforts in this area. The same seminar, for example, reported on work to develop a local financial and demographic reporting system and, although considerable question was raised about the way this work was being carried out, it did not obviate the concern with more effective collection and utilization of appropriate social, economic and environmental indicators as part of the local planning process.

Other useful initiatives - for example, efforts to develop local (*kecamatan* level) indicators and monitoring systems of population and environment, and plans to introduce regular tabulation of social and welfare indicators (*Inkesra*) at *Tingkat II* level based on the expanded *Susenas* sample can be cited. Efforts to improve the poverty targeting of expenditure programming by Local Government are among the more important and deserve the most careful consideration in any overall program or work geared to improve equity in the urban expenditure program. Here, for example, interest in and continued support of efforts to develop locally implemented and managed Planning and Management Information Systems

(PMIS) which include poverty related data and efforts to bring poverty alleviation more explicitly into the sectoral planning process, perhaps through formal provision for some form of Social Impact Assessment (SIA) within the local planning (*PJM*) process (see below), could well be worthy of serious consideration.

2.3 Are Urban Services Benefitting the Poor: Options for Program and Project Evaluation

Merely knowing the income distribution of beneficiaries is only one part of the problem. The ultimate goal is to improve service delivery to the poor in forms they will utilize and at affordable cost. Beneficiary income incidence thus needs to be dealt with in a broader context of overall system evaluation.

2.3.1 Analysis of PJM

Although these are plans, and hence measures of intention rather than results, IUIDP Medium-term Investment Plans (*Perencanaan Jangka Menengah* or *PJM*) which are prepared at the city level, generally contain information which would allow reasonable determination of portions of program expenditure benefitting poor areas, if not the actual urban poor. Virtually all of these plans contain a degree of spatial targeting within which sectoral impacts on areas where poor people (below medium income population) are most likely to reside can, at least in theory, be assessed. Many, although not all, of these plans also contain estimates of income distributions or average income levels within these sub-areas based on limited real-demand surveys which would allow more direct evaluation of likely impact on poor households.

Although they do not yet reach 100% coverage of sectoral funding, an attempt to aggregate and/or summarize information from *PJMs* (which have now been completed for some 170 cities in Indonesia and some 65% of the urban population) in a systematic analytical framework could produce some useful results. Here it should be kept in mind that:

- a. As noted earlier, where completed and approved, *PJM* are increasingly becoming the basis for sectoral funding. This has been an evolving process, but has been enhanced by processes of donor participation which are increasingly built around integrated funding plans defined by sector and which imply specific sectoral project commitments, not only by the donor but also by the GOI. This means that these expenditure programs are increasingly becoming a viable and realistic base for assessing equity intentions and against which the distribution reflected in actual implementation can be assessed.
- b. At present, these plans are the only practical source of information for linking sector with sources of funding (loan, grant; central, local; etc.) and, via spatial intentions

regarding sectoral investment, of linking sources of funding with beneficiary characteristics.¹⁰

- c. On the other side of the coin, there is a degree of variability in quality of plans which could hamper aggregative analysis. One solution would be to focus on plans for which a suitable standard can be assumed, for example those which have been incorporated into major donor projects (SCUDP - ADB, East Java-Bali - World Bank, etc.), and which can be presumed to be indicative of standards to eventually be achieved nationwide.

Here it is also worth noting that while IUIDP processes include specific procedures for financial planning (RIAP) and institutional development (LIDAP), there are no explicit provisions for poverty or more general social impact assessment beyond the conventional planning analysis, noted earlier, which focusses on spatial analysis to define areas in need of service or service improvement. Besides the potential value in getting a better idea of just how much we know or do not know from a close examination of existing *PJM*, this analysis could also be directed toward the development of guidelines and procedures for addressing poverty related concerns in the context of local planning with the ultimate objective of making social impact assessment an essential component of the planning process. Among others, this would be supportive of possible initiatives noted earlier aimed at improving local demographic and social information and would be an integral part of efforts to enhance confidence in the equity directedness of the expenditure programs.

2.3.2 Analysis of Sectoral Expenditure Patterns

Cipta Karya now produces detailed lists of projects undertaken in each financial year under its major Directorates. These are organized by sector, by location (province, city or town), by type of expenditure (e.g. specific type of infrastructure provided, amounts and costs), and by source of funding (e.g. *DIP*, *Inpres*, loan, other own-source revenue, etc.). Besides their usefulness as a sampling frame for more detailed surveys of beneficiaries (see below), simply reorganizing the information in these lists in a tabular format would permit production of indicators on expenditure distribution by key structural variables (e.g. sector/type of expenditure, region, and city size class). Augmenting this with information on variations in 'need' (either sector specific or in terms of variations in socio-economic conditions) could allow a gross level of evaluation of the efficacy of expenditure vis a vis these structural variables.

This a particularly rich source of data which has not yet been systematically exploited. Because it contains summarized information on funding source and, for example, allows

¹⁰This statement applies to within-city analysis. Analysis of interregional and city size class patterns of expenditure by funding source can be carried out based on annual budget data compiled by *Cipta Karya* which is discussed in the following section.

differentiation between foreign and domestic (rupiah) *DIP* expenditure, one can directly examine location and sectoral characteristics of expenditure in terms of funding source and evaluate the relative equity of expenditure patterns in terms of source-based criteria (e.g. biases toward weaker areas in terms of central-local grants as opposed, for example, to loans). As noted earlier, this exercise is necessary background work to development of an appropriate contextual and analytical frame for design of a beneficiary survey. We also feel, however, that this material (which is presently contained in a series of very thick and unwieldy provincial volumes) could be synthesized and presented in ways that would be useful for management information purposes and which could complement work already undertaken by the MFP on development of, mainly financial, monitoring indicators for the Urban Policy Action Plan.

2.3.3 Survey of Project Beneficiaries

Primary research questions which are essentially project or expenditure based generally (due to the relatively small number of households which can be classified as 'beneficiaries') cannot be answered usefully by surveys which draw on a national or regional 'universe' of households for a primary sample frame.

There are a number of technical and methodological concerns which need to be resolved, not the least of which is simply how to identify beneficiaries for projects which are community or area based (e.g. provision of standpipes, *MCK*, access roads, etc.) and are not explicitly tied to individual households, or to distinguish, in a reasonably rigorous sample frame, intended beneficiaries - in terms of project objectives - from those actually making use of the various services being provided. There will probably need to be a fairly high 'pilot' content in any initial survey work, allowing for testing of a variety of field procedures both from the point of view of cost and efficiency and from the point of view of the content validity of the information collected.

In principle the relevant sample is one of projects defined in terms of the annual budget cycle or a multi-year plan. The most appropriate sample frame, discussed in the previous section, are the annual project listings maintained by *Cipta Karya* for their expenditure programs. This is not a complete frame of urban investment. For example, it does not cover urban roads programs funded under *DG Bina Marga*. It also covers both urban and rural programs (e.g. *IKK* or *Ibu Kota Kecamatan*) since these are also part of the *Cipta Karya* expenditure program. The lists do, however, cover the main sectors of USAID interest - water supply, environmental sanitation (human waste, solid waste, flood control) and urban housing (*KIP* and Market Area Improvement or *MIP*). More important, as noted earlier, there is a direct linkage to the *IUIDP* process since, for areas where *PJM* have been produced, these data are expected to more or less represent reflections of annual time slices of medium-term sectoral expenditure programs. Finally, the data contain appropriate information for sample stratification, notably information on project location (down to the city or *kecamatan* level), type of expenditure within each sector and funding source.

One additional problem is that these rather comprehensive data sets are prepared as part of the budgeting process and reflect planned as opposed to actual expenditure. Final sample selection would need to be based on projects actually implemented. Linking budgeted projects with reports on implementation can be done as *Cipta Karya* does have its own monitoring apparatus for reporting of project expenditure. However, time lags could be introduced which could mean that field work could only be carried out some months after the end of the relevant fiscal year. Coupled with data collection and processing time requirements would likely mean a delay of at least 9-12 months from the end of a particular fiscal year until preliminary results of such a beneficiary survey would become available.

Addendum 1

Policy Formulation and Planning Issues in Targeting and Resource Allocation

At the national policy level, and virtually since the start of the New Order Government, there have been clear distributional objectives in programming and project expenditure. For example, and in terms of broad spatial priorities, two major groups of equity-based concerns have dominated national policy since the mid 1970s. First are concerns related to inter-regional equity (in general reflecting desires to accelerate development in 'Outer Island' regions and, more recently, in what is referred to as 'Eastern Indonesia' (*Indonesia Bagian Timur*) or *IBT*) and, second, concerns related to rural-urban distributions of the fruits of development (frequently phrased in terms of objectives aimed at promoting rural and smaller town development, particularly on Java, as a means of stemming "push" driven migration to the larger urban centers). A pertinent example is given in the *GBHN* guidelines on Spatial Development for *Repelita IV* (1983/84-1988/89) which roughly translates as follows:

In the framework of implementing national development which is spread more equally over the country, efforts will be made to harmonize the growth rate among regions and in each region. For this purpose it is necessary to increase smooth communications within one region or island as well as between regions and islands. More attention should especially be paid to the development of the relatively backward regions, the isolated regions and border territories. Besides, due attention should be given to the minus and densely populated regions so as to minimize the flow of people moving to the big cities. In this regard, the capacity for planning, executing and controlling apparatus for regional development needs to be improved.¹¹

None of this is explicitly poverty related, although it does clearly reflect a policy framework within which disparity is to be addressed and it does complement the long-standing view that poverty is essentially a rural problem and a problem of rural Java in particular. For this, as well as for reasons of national stability, regional development has been seen as a major policy tool in promoting greater equity and in reducing poverty at a national scale. The emphasis on regions outside Java is not only aimed at indigenous population, but also at increasing the attractiveness of these regions to potential migrants from the densely populated core through labor related movement and transmigration.

¹¹National Urban Development Strategy, **Final Report**, Jakarta, Directorate of Urban and Regional Planning, Directorate General of Human Settlements, Department of Public Works, 1985, p. 20.

Rural and regional development concerns have also been carried forward to *Repelita V*. Here reference can be made to a recent World Bank study¹² which highlights four specific programs: (a) a program aimed at increasing service provision (mainly for education and health) in poorer communities (*P3D*) (b) a program aimed at water provision for lower income groups in water-stressed urban slum areas (c) a program aimed at improving local water supply and sanitation in rural areas (*RWSS*) and (d) a series of integrated area development projects (*IADPs*). Three of these programs are essentially rural in nature.

Data on the distribution and changes in service levels obtainable from major national census and survey sources is an important component of overall program or system evaluation and, thus, greater attention should be paid to its analysis. At this level, the goal is not only to see if public expenditure is being aimed (disproportionately) toward poorer regions and toward lower income segments of the population within these regions, but also to see whether or not gaps (adjusted for appropriate differences in service standards) are narrowing over time. Equity objectives at this level of analysis may be phrased in a variety of ways - as national aggregates, between regions, between rural and urban or various size classes of urban areas, and among various sources of funds. The need is to have as clear agreement as possible on the levels of aggregation relevant for different policy and planning purposes. Once these have been established, appropriate measurement instruments and monitoring systems can be recommended.

With respect to the specific sectors of concern to MFP/A, it should be stressed that broad based equity concerns are fundamental to the "basic needs" approach underlying public provision of a range of services in both rural and urban areas. This includes basic public works investment in urban roads, water supply, sanitation, flood control, etc, and it is tied primarily to the use of appropriate technologies (e.g. communal as opposed to individual facilities) and to subsidization of these technologies within the budget structure. Program criteria exist, for example, which emphasize the use of public standpipes and communal bathing, washing and toilet facilities (*Mandi, Cuci, Kakus* or *MCK*) for poor people and areas.

The World Bank report cited above devoted an entire chapter to the objectives and performance of poverty-related efforts in urban water supply, sanitation, kampung improvement and public housing up to the end of *Repelita IV*. The analysis carried out there drew heavily on results of the Housing Market Behavior Survey carried out by the Urban Institute and P.T. Hasfarm Dian Konsultan in 1988 as part of the Urban Policy Studies Project, which (as a result of collecting data simultaneously on income/expenditure levels and levels of service) could be used to demonstrate the degree of disparity between poor and non-poor households.

¹²World Bank, **Indonesia: Strategy for a Sustained Reduction in Poverty**, Washington D.C., 1990

In general, however, it seems safe to say that there are few explicit poverty criteria in IUIDP guidelines and procedures. There are, however, a number of more ecological criteria which are supposed to play a role in infrastructure development planning and which have a decided relation with the location of generally poorer households within the urban sphere. Field visits also tend to confirm that these same ecological/ environmental conditions (e.g. high density settlement, frequent flooding, extensive pollution of surface and/or shallow ground water sources) are equally if not more so perceived by Local Governments as factors which should be used in designating areas for high priority attention.

This reflects the preeminent concerns of the physical planner. People (rich or poor) living in areas where they cannot be expected to be able to provide (relatively inexpensively) an environmentally sound level of service for themselves should have first priority for public service provision. In this respect the fact that poor people tend to live in environmentally poor areas may be seen as somewhat fortuitous. On the other hand, if accepted, it offers a potential for evaluating urban infrastructure plans and implemented programs at an area level; in effect asking if projects are, in fact, being directed (or an appropriate proportion of projects directed) toward those parts of the urban area where environmental conditions are poorest and where privately initiated options are most constrained.

Income concerns appear more explicitly in guidelines dealing with financial planning and financing of sectoral projects. There is a linkage here to service standards under a modified 'basic needs' approach which has adopted by IUIDP. Here, basic needs remains a 'core' element (all people in need of public services should be served at least at a basic level) but this is modified by the idea that, where possible, the better off should be offered higher standards of service (commensurate with demand) and charged accordingly, presumably according to a progressive scale. To the degree that cost recovery becomes a principle of financial planning for service provision, there is an implicit trade off between allocating more funds to the poor (where cost recovery potential is less) and building a sustainable self-supporting program over the longer term which requires at least some emphasis on those (the better off) more likely to maximize returns on investments.

Equity concerns also differ according to sources of project finance. In theory, grant aid to Local Governments should have a higher equity component than loans for the simple reason that, for grants, cost recovery is less of a problem - they do not need to be paid back.¹³ For the bulk of Housing Guarantee Loan, which is given as support to sectoral *DIP* (e.g. to grant) funding, this raises the question of the level of aggregation (in terms of funding

¹³Reference should be made here to the one poverty-related statement in the Urban Policy Action Plan (PAP) (Section 4.04) which stresses the equity driven nature of grant (*DIP* and *Inpres*) funding and the need to develop systems for improving targeting of such expenditure and to monitor whether or not projects funded predominantly with grants are reaching the intended beneficiaries. This aspect of the PAP is discussed in greater detail in the following section of the report.

sources) at which any attempt to monitor or evaluate the equity and gender sensitivity of expenditure patterns should be carried out. In short, it may well be more relevant to ask about the degree to which assistance under the principal grant components is being directed toward the poor.

Although distinct from the *DIP*, *Inpres* is also seen as one of the most equity driven components of expenditure and here the World Bank poverty study cited earlier, notes the significant real increase in *Inpres* allocations in FY 1990/91, particularly in the block grants (*Inpres Dati I*, *Inpres Dati II*, and *Inpres Desa*) provided to various levels of local government, as an indicator of increased GOI attention to poverty related concerns. Because of the way allocations are handled, except for *Inpres Dati II* which is per-capita based, there is clear bias in distribution away from the more densely populated regions and this has been seen as means of promoting increased interregional, if not interpersonal, equity by many observers. Even so, this is not a guarantee of benefit accruing to the poor and the Bank report clearly notes that "effects of these increased allocations in offsetting existing regional income disparities [will need] to be closely monitored."¹⁴

In practice, however, the situation is more complex and there are even significant problems in trying to evaluate poverty relevance of different funding sources at the project level. First, some projects may be funded from multiple sources (e.g. APBN, ABLN, *Inpres* Grants, Local Own Revenue, etc.). One is faced with the question of how to evaluate funding sources within such a context. Second, if financial plans conform to guidelines and objectives (vis a vis use of loans and local own revenue, for example) and if overall equity in distribution of expenditure can be demonstrated at the city or local government level, it is not clear, from a policy or program management related perspective, why one needs to be concerned with how funds from particular sources are allocated.

This suggests that one primary research question has to do with the degree to which the poor are being attended to by expenditure programs regardless of source of funds. If qualification is required, it should reflect income group or area-related measures of objective need, defined in terms of base (pre-expenditure) levels of service provision and measures of "need" for public service as opposed to private service provision. Concern with base levels of

¹⁴Here, the data in the Interim Evaluation Report (Tables 2.1 and 2.2) which show a drop in *Inpres* expenditure in the urban investment program in 1990/91 and 1991/92 should be interpreted carefully. This does not mean that *Inpres* funds have been declining, merely that local governments are allocating a smaller share of *Inpres* to the urban investment program as defined in the report. Although it remains an hypothesis at this stage one wonders if this simply reflects rational decision making on the part of IUIDP sectoral planners in utilizing other forms of grant aid (e.g. *DIP* and, particularly, foreign aid) for types of projects where this is more readily available and budgeting *Inpres* for projects outside of the defined 'urban investment program' where *DIP* funding may be less readily available.

service is, in fact, also less necessary if we can concern ourselves only with the **gap** between the poor and the better off. In this case, for example, if we want to ensure that the gap between below and above median income households is not getting larger, it is sufficient to show that 50 percent or more of expenditure is benefitting below median income households. We do not need to ask how wide the gap was to begin with, even though, obviously, for targeting purposes, this latter question is a rather significant one.

Issues in Program and Project Planning, Implementation and Evaluation

Ultimately, the main question has to do with just who is benefitting from existing patterns of urban expenditure, and the degree to which these investments are meeting perceived needs at an affordable level of cost.

Are monitoring surveys needed? Particularly if the goal is to monitor overall expenditure patterns at the national or broad regional level, by sector and, particularly, by funding source, the answer is clearly yes. On the other hand, it seems that, for both conceptual and methodological reasons, there are limitations on the cost-effectiveness of efforts to measure income distribution of project beneficiaries, unless this is closely tied to more comprehensive research designs aimed at obtaining information for improving service delivery and overall economic efficiency of system implementation and operation. The question is not only if urban services are reaching the poor, but also if such services are meeting a defined demand, at an affordable level of cost to beneficiaries and if they are being utilized and managed in an efficient manner.

There are also legitimate questions about the utility of emphasizing target shares of sector expenditure to be aimed at poor households.

Targeted shares of expenditure aimed at poor households are, themselves, basically policy variables. There may well be a validity in assigning a target for each sector, but this should be exogenously determined based on a variety of information on relevant service levels, technologies utilized, levels of real demand, etc., differentiated by income group. Survey data can be useful in building appropriate analytical models, but it is these models which should be used to direct policy and expenditure patterns. Simply knowing the share of expenditure going to particular income groups has limited policy or program relevance outside of this more comprehensive framework.

In practice, the only valid assessment on appropriate levels of equity in program expenditure lies not in analysis of project beneficiaries but in global measures of service distribution across various regions and income groups in the society. The key questions (which are exclusively the province of population-based national and regional household surveys) remain ones of the share, and trends in the share, of urban households with access to safe services and of whether or not conditions of the urban poor are improving or deteriorating in absolute and/or relative terms.

Even so, improving the allocation of central-local transfers (grants) toward the poor merits closer attention. Work in this area within *Bappenas* has already led to the creation of a new *Inpres*, (*Inpres Perkotaan*) which is being implemented at a level of Rp. 38 billion for FY 1992/93 and directed, at this stage, toward supporting basic sectoral planning (*PJM* preparation) for IUIDP. Most important however, is not what has been accomplished to date, but the existence of a climate supportive of a wide range of initiatives aimed at improving resource allocation in ways that will most directly benefit the poor.

As intimated earlier, the research agenda is not simple and, if it is to be meaningful, the range of assessments which should be part of the system extend beyond those related solely to beneficiary income distribution.¹⁵ For example, among the questions to be asked and types of assessments to be carried out we could include:

- a. Is system design appropriate for the poor?
 - Assessment of standards and technologies
 - Assessment of demand and affordability
 - Assessment of pricing policies
- b. Is implementation effectively targeted toward the poor?
 - Assessment of criteria and standards used for targeting
- c. Are the poor actually benefiting (ex post facto)
 - Assessment of utilization of provided infrastructure and services
 - Assessment of impact on welfare and environment

All of these questions are indicative of objectives which must be part of overall objectives aimed at improving conditions among the poor, and are reflective of what we feel is the critical issue in this process; that is - improving service delivery to and service utilization among lower income households. This clearly includes, but is not limited to, assessment of the income incidence of beneficiaries of urban sector expenditure programs and projects. It also includes the need to place these expenditures within a broader financial and administrative context.

A useful example can be drawn from the discussion on urban clean water supply in the World Bank study on poverty in Indonesia cited earlier. They note the lack of financial incentives for *PDAM* (local water enterprises) to build standpipes in poor areas, even though these are supposed to be the main technology for reaching, and subsidizing water provision to,

¹⁵In fact, the same complexity applies to dealing with gender-relevance at the project level and more or less the same typology of research questions as indicated here for assessing beneficiary impact in terms of income group could be applied to assessing the degree to which women, and particularly poor women, are or are not being benefitted by infrastructure delivery.

poor households and national guidelines exist on ratios of standpipes versus house connections (50:50) that should be part of programmed expenditure. For public supply they note a tendency to prefer construction of public hydrants (*hydran umum*) which can be, in effect, sold at full cost to concessionaires who, in turn, sell water to final consumers, but often at exorbitant rates. One recommendation here is actually for further deregulation of water supply, allowing even those with private supply (house connections) to sell water, thus breaking the monopoly position of concessionaires and, hopefully, reducing costs to those who must count on purchased water for survival.

Another example can be drawn from the work of Dr. Oey-Gardiner in looking at Community Based Development (CBD) activities within the Integrated Kabupaten Infrastructure Development Program (IKIDP). Her conclusion was that while CBD was a useful idea, it was simply infeasible in most areas within the current administrative and bureaucratic structures. She suggested greater emphasis on a concept of Community Participation within the current bottom-up/top-down planning and implementation system¹⁶ as a means to promote popular awareness and involvement in infrastructure development, particularly in poor areas and among poor people.

Thus, to the degree that this paper adopts a view that the main objective is one of service delivery and utilization and not just one is not just measurement of income incidence, the evidence seems to imply a need to adopt research designs and methodologies which include the ability to look at community wide factors and at institutional linkages among others.

¹⁶Bottom-up as represented by the *Rakorbang* system for setting local priorities and project wish lists, and top-down as represented by the still Central Government dominated processes for project selection and implementation.

Table 1 - Percentage of Households Using Electricity for Lighting by Urban-Rural Residence and Region, 1980 and 1990

Region	Urban		Rural	
	1980	1990	1980	1990
Java	47.4	86.7	3.8	24.6
DKI Jakarta	50.3	95.6	16.1	-
W. Java	50.8	86.8	5.6	38.4
C. Java	37.7	82.0	1.7	32.2
DI Yogyakarta	47.0	82.9	1.7	35.3
E. Java	49.2	83.4	3.9	32.8
Sumatra	49.7	79.8	8.5	23.7
Kalimantan	60.8	85.8	10.6	22.1
Sulawesi	52.0	81.9	8.5	28.7
Nusatenggara	47.7	83.7	5.1	29.9
Maluku & Irian	48.5	77.2	7.0	18.6
INDONESIA	48.5	85.2	5.4	30.7

Sources: 1980 - **Penduduk Indonesia: Hasil Sensus Penduduk 1980**, Seri S, Nomor 2, Jakarta, Biro Pusat Statistik, 1983, Tabel 63.1.
 1990 - **Penduduk Indonesia: Hasil Sensus Penduduk 1990**, Seri S, Nomor 2, Jakarta, Biro Pusat Statistik, 1992, Tabel 61.1.

Table 2 - Percentage of Households Served by Piped Drinking Water Supply by Urban-Rural Residence and Region, 1980 and 1990

Region	Urban		Rural	
	1980	1990	1980	1990
Java	25.3	30.4	1.7	3.2
DKI Jakarta	30.0	46.0	5.4	-
W. Java	13.2	18.2	1.6	3.0
C. Java	23.4	24.7	1.6	2.5
DI Yogyakarta	11.3	9.7	1.2	1.2
E. Java	35.8	40.7	2.0	4.2
Sumatra	27.8	33.7	2.2	4.5
Kalimantan	28.6	53.7	1.1	4.6
Sulawesi	30.3	50.2	2.0	7.1
Nusatenggara	29.1	37.5	5.7	11.0
Maluku & Irian	49.7	56.2	3.6	7.4
INDONESIA	26.4	33.4	2.1	4.4

Sources: 1980 - **Penduduk Indonesia: Hasil Sensus Penduduk 1980**, Seri S, Nomor 2, Jakarta, Biro Pusat Statistik, 1983, Tabel 64.1.
 1990 - **Penduduk Indonesia: Hasil Sensus Penduduk 1990**, Seri S, Nomor 2, Jakarta, Biro Pusat Statistik, 1992, Tabel 62.1.

Table 3 - Percentage of Households with Private Toilet and Septic Tank by Urban-Rural Residence and Region, 1980 and 1990

Region	Urban		Rural	
	1980	1990	1980	1990
Java	28.1	42.2	3.7	6.9
DKI Jakarta	41.8	57.9	22.6	-
W. Java	18.7	36.8	4.0	8.3
C. Java	23.7	37.3	2.8	6.4
DI Yogyakarta	30.3	36.5	6.5	12.2
E. Java	27.7	40.4	3.5	5.5
Sumatra	32.4	48.8	4.0	7.8
Kalimantan	26.5	47.8	2.9	4.8
Sulawesi	33.0	45.4	5.2	8.2
Nusatenggara	26.6	41.8	3.8	7.8
Maluku & Irian	31.4	48.8	4.6	7.3
INDONESIA	28.9	43.7	.8	7.1

Sources: 1980 - **Penduduk Indonesia: Hasil Sensus Penduduk 1980**, Seri S, Nomor 2, Jakarta, Biro Pusat Statistik, 1983, Tabel 67.1.
 1990 - **Penduduk Indonesia: Hasil Sensus Penduduk 1990**, Seri S, Nomor 2, Jakarta, Biro Pusat Statistik, 1992, Tabel 65.1.

Addendum 2

Gender Considerations

Gender issues are important in a range of policy and program contexts, particularly so in programs aimed largely at the provision of environmental infrastructure services impinging on family health conditions for which women have a strong and widely recognized responsibility. For the simple reason that equity based policies and targets seldom explicitly include gender specific goals (although they often explicitly recognize the importance of the 'role of women'), it is important to include at least some reflection on gender considerations in any attempt to define specific objectives for research or monitoring activity.

The following paragraphs attempt a brief summary and discussion of the policy environment regarding women in Indonesia in recent years, with a focus, due to the nature of this report, on the public works sector and, particularly, programs carried out by the Directorate General of Human Settlements (*Cipta Karya*) in the Department of Public Works. The introductory nature of this discussion should, however, be kept in mind and the reader should refer to more detailed sources for additional documentation.¹⁷

Policies and Programming at the National Level

What is perhaps most interesting in the Indonesian policy environment is the prominent position given to gender. Starting in 1978, the *GBHN* along with documentation for *Repelita III* (1978/79 - 1983/84) devoted a section to the role of women in national development. In the same year, an Associate Minister for the Role of Women was appointed, a post which was elevated in 1983 to full Ministerial status as the State Minister for the Role of Women (*Menteri Negara Urusan Peranan Wanita* or *MenUPW*). Policies expressed in these documents have undergone minor changes over the years, but it seems safe to say that there has been a consistent and overriding emphasis throughout on women's roles in the family and, more specifically, on enhancing the role of women in creating healthy and prosperous families (*P2WKSS*), and in guiding the younger generation in the context of developing the Total Indonesian Person (*Manusia Indonesia Seutuhnya*).

Key policy statements for *Repelita V* are contained in the 1988 *GBHN* and can be summarized as follows:

¹⁷For women, the most useful document is Oey-Gardiner, Mayling, (1991), **Women in Development: An Update for Indonesia**, Manila, Programs Department (East), Asian Development Bank.

1. To raise and enhance the status and role of women in society according to their nature as women, attention will primarily be paid to improving the welfare of poor women in urban as well as rural areas, and secondly to those aged 15-29 years.
2. To develop healthy, prosperous and happy families, women should not only be objects but also implementers and beneficiaries in various fields of development. For this purpose the program for Enhancing the Role of Women toward Healthy and Prosperous Families (*Peningkatan Peranan Wanita menuju Keluarga Sehat dan Sejahtera* or *P2WKSS*) has to be strengthened and better coordinated.
3. With regard to education and skills, policies will be directed at (a) eliminating illiteracy, ignorance of Bahasa Indonesia and deficiency in basic education, (b) encouraging, especially poor women, to gain access to post basic education, (c) promoting a more conducive social environment for women to gain equal access to formal and informal employment as well as various positions in society, (d) encouraging greater participation among women in the development and utilization of science and technology, and (e) enhancing knowledge and skills of women in raising their children.
4. Efforts to improve family welfare will increasingly be based on active social participation in various development activities. In this regard the role of *Lembaga Swadaya Masyarakat* or *LSM* (a term often used as a translation for Non-Government Organizations or NGO), the Family Welfare Movement (*Pembinaan Kesejahteraan Keluarga* or *PKK*) as well as other women's organizations will be further developed in order to enable them to participate in all aspects of development and in all areas.
5. To enhance the role and responsibility of women in development, greater opportunities will be given to women to become decision makers, policy makers, planners and beneficiaries of development. (Oey-Gardiner 1991)

Implications for Program Implementation

As a State Ministry, *UPW* does not implement its own policies. Rather, its role lies in the establishment of policies and in the coordination of activities which are carried out by other sectoral departments, other government agencies and non-government organizations. Each department is thus supposed to incorporate WID efforts as part of its overall activity, following guidelines and initiatives emanating from *MenUPW*. During *Repelita IV* most sectoral departments established a bureau, unit or group of officials specifically assigned to handle women's programs, all under the general title of Enhancing the Role of Women (*Peningkatan Peranan Wanita* or *P2W*). These units are supposed to be responsible for seeing that women's issues are integrated into policy formulation and plan implementation for their respective sectors. For example, the Department of Public Works received funds to train female extension workers for housing improvement, and including sub-sectors such as water, sanitation and pollution control.

For *Repelita V*, regional responsibility for coordinating WID programs was elevated to the level of the Deputy Governor.¹⁸ In provinces with no Deputy Governor, the Regional Government Secretary (*Sekwilda*) was to be in charge. At the second level of Local Government (*Dati II* or *Kabupaten/Kotamadya*) overall responsibility was assigned to the Second Level Regional Government Secretary (*Sekwilda Dati II*). This was a major accomplishment since it placed WID concerns in a relatively high position within the regional bureaucracy. In theory, at least, the ability to influence actions and to hold regions accountable should be improved.

In practice, however, the abilities of *MenUPW* to influence activities, particularly those in more non-gender specific sectoral programs, is limited. *MenUPW* has few resources to actively supervise or monitor individual sectoral departments and their programs and the departments, in turn, generally have few skills or, perhaps more important, any strong motivation to spend the time required for WID incorporation. Here a distinction should be made between efforts which are **WID directed** in the sense that they are more or less directly targeted toward women and those which are **WID integrated** in the sense that they require building a WID component into what is essentially a non-gender specific program or project. Programs and activities implemented through women's organization, most notably the *PKK*, are a good example of the former. *MenUPW* also coordinates specific projects (most of them donor funded), some of which are directly concerned or contain components concerned with the housing sector.¹⁹

WID integration is even more problematic. Within Public Works, for example, program targeting generally stops at the household level (or at the level of groups of households) rather than dealing with gender relations within them. Concepts are more likely to be expressed in terms of need - defined in terms of service levels (the proportion of households or population served) or in terms of area-specific constraints (high population density, lack of suitable ground water, proneness to flooding, etc.) limiting the ability of household to provide safe services on their own. Certain programs, most notably the Kampung Improvement Program (KIP), include specific mechanisms for community involvement, including women, but, in practice this has often been limited to community involvement as a source of labor (*gotong royong*) at the time of project implementation. Elsewhere, practical avenues for WID integration are even more limited; the only potential avenue within the annual programming and budgeting structure currently lying in the bottom-up series of

¹⁸Previously this job was held by the Head of the Regional Office of the Directorate of Community Development (*Kepala Direktorat Pembangunan Desa* or *Kadit Bangdes*).

¹⁹For example, in *Repelita V* there are specific efforts on enhancement of the role of women in transmigration settlements and fishing villages, on enhancing the role of women in urban slum areas through their status and quality of life, and on promotion of clean water and sanitation in rural villages.

meetings (*Rakorbang*) held, starting at the village level, to designate priorities and potential projects and where women's interests could conceivably be expressed.

Recently, there have been efforts to incorporate Community Based Development (CBD) within the broader Cipta Karya program aimed at Integrated Kabupaten Infrastructure Development (IKIDP). In principle, CBD provides a concrete framework for both women and the poor to be directly involved in the provision of infrastructure for their respective communities. In practice, however, there are questions about just how far this involvement can reasonably be expected to extend. Oey-Gardiner (1992), in a report to the Dutch Government notes the practical difficulties of by-passing established administrative systems (notably those involved in annual programming and budgeting) and suggests that a simpler, and more appropriate approach may be to try and increase levels of community participation, including women, within and in support of the current administrative structures and procedures.

Conclusion

While the significant role women play in relation to infrastructure utilization in Indonesia is undeniable, the major problem faced by these women is ultimately still one of poverty and limited access to safe services in the same way as for men. In this sense, and in the context of this report, the equity at the household or family level in the provision of public urban infrastructure should, as is more or less currently the case, remain the primary objective in program design. Even so, key women's issues can still be addressed in terms at the level of the individual project (e.g. in terms of design, implementation and management) and focus on the need to sensitize such things as location of infrastructure, as well as management and operations, to the roles and needs of women in poor households.²⁰ More important to this paper, it means that methodologies aimed at measuring conditions or beneficiary impact among poor households can also be used to measure conditions among poor women. The key remains that, within an overall or project-defined universe of poor or non-poor households, household surveys or other research instruments should be addressed to women as well as to men, and analysis carried out on a gender-specific basis in order to assess any differential impact/benefit on women and the degree to which projects meet needs of poor women in terms of both their familial and economic roles.

Because of this reasoning, the paper focusses on poverty and on issues related to policy formulation, programming and beneficiary impact monitoring among poor households. Gender issues are subsumed within this framework; gender analysis is seen throughout as an important component of study or system design.

²⁰For examples from other countries on how the inclusion of women's needs in infrastructure delivery and maintenance can increase the effective utilization of such services, see Jo Beall, **Integrating the Gender Variable into Urban Development**, paper prepared for the DAC meeting on Aid for Urban Development, OECD, Paris, November 1992.

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