

**IMPROVING THE COLLECTION AND USE OF  
PROGRAM PERFORMANCE DATA**

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***Submitted to:***

Mr. James Norris, Director  
USAID/PAKISTAN

***Submitted by:***

Diane Ponasik, ANE/DP  
Chris Hermann, ANE/DP  
Larry Cooley, Management Systems International (MSI)

## I. OVERVIEW

The Scope of Work for this assignment is presented as Attachment 1 to this report. Essentially, the team was asked: (1) to review current procedures for collecting, analyzing and using performance data; (2) to make recommendations for improving those procedures; (3) to outline an ongoing and feasible process for implementing the recommended improvements; and (4) to initiate this process in one or more areas of the Mission's portfolio. In conducting this task we spent virtually all of our time inside of the Mission reviewing documents, talking to people, developing ideas and testing them out. More specifically, we:

- reviewed the Mission's major program documents (CDSS, Action Plan, sector strategy statements, etc);
- reviewed current information systems (PROMIS, Timeline implementation plans, PIRs, policy dialogue agenda, monthly engineering reports, quarterly economic review, project evaluations, etc);
- discussed existing formal and informal information systems, information needs, and decision processes with most Office heads and several project officers;
- prepared and discussed ideas for introducing improved systems;
- developed and discussed specific strategies for generating and utilizing information in selected areas of the Mission's portfolio; and
- developed more complete proposals for data collection, analysis and use in two program areas as examples of what might be done.

This report briefly summarizes our observations and suggested actions.

### A. CURRENT PROCEDURES

#### 1. Description:

The Mission has 23 major "projects" but many of these are very large, include multiple components and are best viewed as "programs". It might thus be more appropriate to consider the Mission as having ± 80 projects in its portfolio. This number is divided roughly evenly between activities with which the Mission has been involved for some time and activities that have been introduced into the portfolio relatively recently. Internally, the Mission is organized around projects within Offices whose briefs are essentially sectoral in nature.

Of the ten problem areas featured in the Action Plan and CDSS, three are addressed principally by a single project, three or four others are addressed principally within the context of a single sector, and the remaining three or four each cross-cut several sectors.

Considerable effort has been devoted during the last two years to developing the PROMIS system as a means to monitor in a consistent manner the performance of projects with respect to planned input provision, expenditure and output achievement. This system is very detailed, increasingly accepted and, by all accounts, a major advance over what existed previously. Data to drive these reports is extracted (for the time being, manually) from the MACS system semi-annual reports and from individual discussions with project officers. The PROMIS reports, in turn, drive the development of PIRs (which are used exclusively for external reporting) and the Mission's semi-annual portfolio reviews, and are used to summarize overall Mission performance with respect to input provision and expenditure. The PROMIS system was not designed to incorporate any systematic information on project assumptions, purpose and goal level accomplishments, or contribution to Action Plan objectives.

PDM has also instituted a system of standardized implementation plans, using the Timeline software, which serves to schedule project activities, identify milestones and provide an additional basis for planning and tracking project progress. To date, these reports have been compiled and used primarily by PDM but there is some feeling that a few project officers are beginning to regard these schedules as useful management tools.

A third and final system currently on the PDM drawing boards is a system of "monitoring plans" for each of the Mission's projects. In this regard, PDM has a somewhat ambiguous role that combines technical assistance to project officers with an implicit oversight function. As envisioned, PDM would work with individual project officers to identify indicators and data collection systems for their respective projects, as well as procedures for reporting relevant portions of this data. The projects, not PDM, would be responsible for actually collecting the data. Procedures within PDM for coordinating, synthesizing and using the resulting information are not yet fully established. A Scope of Work has been prepared for a locally-hired person (probably a spouse) to assist in implementing this system.

There is currently no regular procedure (other than project evaluation) for collecting, compiling or reviewing data above the "output level" for projects or for assessing progress with respect to the ten problem areas outlined in the CDSS and the Action Plan. The indicators reported in the Action Plan represent a real and serious effort to respond to this need. These indicators, however, often fail to differentiate between "country trends" and "program performance"; and the "benchmarks" cited are most often expressed in terms of events or actions rather than quantitative progress toward program objectives and targets. In the case of several of the ten problem areas, this results in the stated area of emphasis serving more as a category of activity than as an objective in any achievable or measurable sense. At least as importantly for purposes of our exercise, no arrangements have been made for collecting, reviewing or interpreting data on a number of the indicators and benchmarks used in the Action Plan.

The major sources of data available to project officers and senior managers are:

- quarterly reports from contractors
- PROMIS reports and PIRs
- results of special studies, project evaluations and audits
- results of ad hoc reviews conducted in the context of major planning and policy dialogue exercises
- national statistics
- informal information from a variety of sources.

There are several occasions when it would be possible to review systematically project and portfolio impact in relation to the objectives of individual projects and/or the overall portfolio. These include:

- semi-annual portfolio reviews
- annual preparation of the Action Plan
- preparation for semi-annual policy dialogue meetings with the GOP
- periodic staffing analyses
- responses to individual project evaluations and audits.

At present portfolio reviews are driven by the PROMIS system and hence focus primarily on implementation progress; Action Plan preparation is based on ad hoc assemblage of available information on indicators and benchmarks; and policy dialogue discussions are informed by the results of special studies and by macro economic data assembled for such discussions by the Program Office. To date, most project evaluations have focused on "process" rather than "impact", and those which have focused on impact have normally had to collect primary data for that purpose.

## 2. Assessment:

Views within the Mission differ with respect to the adequacy of the current situation. Those who are dissatisfied complain about the ad hoc nature of information at anything above the output level, the reliance on episodic project evaluations to generate information on project effects, the need to make strategic program decisions without adequate information, and the tendency of some project officers to be absorbed by the details of project implementation. Those who express relative satisfaction with the current system acknowledge these facts but believe that the presence of more systematic and regular information would be unlikely to have any significant effect on program composition or quality.

There is a widely held view among Mission personnel that they are heavily taxed by their current managerial and reporting responsibilities. People are thus resistant to any action that would add to those responsibilities, even though many of these same individuals acknowledge the potential value and relevance of improved information. Natural reluctance to take on what is suspected to be a somewhat daunting task is compounded in several cases by a suspicion that such information would be unlikely to influence resource allocation or program direction in any significant manner.

It is our view that it is both feasible and desirable to make significant but incremental improvements in current information systems and procedures in the Mission. It is also our view that there is a reasonable prospect of incorporating certain of these changes into the "organizational culture" and standard operating procedures of the Mission over a 2-3 year period. The key to any such changes, however, will be simplicity, commitment of necessary resources, and (most importantly) unambiguous evidence that the information generated is valued by Mission management and put to practical use.

The ten problem areas, indicators and benchmarks cited in the CDSS and Action Plan constitute the most useful starting point for defining Mission program and project information systems. Certain of these problem areas are more promising than others from a program management and program information perspective. The following table summarizes our tentative conclusions with respect to each of these areas.

### Problem Areas Preliminary Assessment

1. Balance of Payments: Country trend currently monitored using available GOP/World Bank data. Impractical to assess specific effects of USAID programs and projects.

2. Domestic Resource Mobilization: Country trends currently monitored by Program Office annually. Feasible to begin monitoring and aggregating major effects of Mission's progress once a year, but probably impractical to do this very rigorously.

3. Agricultural Productivity: Overall country trends currently monitored and reported. Feasible to monitor program results only in terms of the purpose and goal level indicators of specific projects.

4. Energy Deficits: Feasible to track both country trends and the more obvious contributions of USAID-supported programs and progress.

5. Population: Feasible to track both country trends and the more obvious contributions of USAID-supported programs and projects.

6. Child Survival: Feasible to track both country trends and the more obvious contributions of USAID-supported programs and projects.

7. Primary Education: Feasible to track both country trends and the more obvious contributions of USAID-supported programs and projects.

8. Improvement of Key Institutions: Impractical to monitor country trends or to aggregate USAID program performance, but feasible to assess impact of individual projects in a consistent manner and to assess performance across the portfolio.

9. Lagging Areas: Feasible but politically sensitive to monitor country trends. Feasible to assess more obvious contributions of USAID-supported programs and projects.

10. Narcotics: Country trends currently being monitored. May or may not be feasible to address contribution of USAID-supported programs and projects.

One item among the problem areas listed above, the strengthening of key institutions, is perhaps best regarded as a means or strategy for achieving other objectives rather than as an end in itself. We nevertheless feel, as do several senior members of the Mission staff, that the introduction of a watching brief, and attempt to capture lessons learned on institutional strengthening efforts across the Mission's portfolio would be extremely valuable. There are, in addition, at least four other cross-cutting issues that potentially warrant such monitoring and attention. These are:

- input delivery and financial performance (a system already developed and instituted as an offshoot of the PROMIS system);
- policy reform (a system which used to exist within the Program Office and could be resurrected relatively easily);
- natural resource management (which relates to selected elements of the agriculture, energy, engineering and rural development portfolios); and
- participation by women.

These areas, like institutional strengthening, are perhaps best dealt with as areas of concern rather than as explicit goals. As with the ten problem areas noted above, the main considerations in assessing the value of capturing and synthesizing such information in a systematic manner would be (1) the probability that such information would influence major decisions by USAID or the GOP and/or would be required by AID/W; and (2) the extent to which ad hoc or informal information could suffice to meet these needs.

B.

#### CONCLUSIONS AND RECOMMENDATIONS

Should the Mission wish to move forward in implementing improved procedures for collecting, analyzing and utilizing program performance data, we would propose the following nine recommendations:

(1)

Use Action Plans, semi-annual portfolio reviews and semi-annual policy reviews with the GOP as opportunities to consolidate and take action on program and project impact data.

Currently, these planning and program review activities to proceed on the basis of data derived from macro-economic analyses, special studies, project evaluations and ad hoc data assembly. Once established, a regularized system of annual and semi-annual monitoring of program effects and key assumptions should improve the quality of these exercises and reduce the effort associated with them. This approach would also reduce the reliance on episodic project evaluations as ways of generating information and discussion about project and program effectiveness. A suggested approach to modifying the current portfolio review process as a means of initiating certain of these changes is discussed briefly below (see recommendation 5). The practice employed by certain projects of holding collaborative project reviews once a year with contractors, government and USAID employees is another such opportunity.

Project evaluations and the Evaluation Committee are extensively used by the Mission as a means of generating impact information and identifying the action implications of that information at the project level. Evaluation summaries have typically been well prepared and include a set of actions to be taken. One possible means of extending the utility of these exercises would be for the Mission to initiate a procedure, probably tied to the PIR or PROMIS system for monitoring the follow-up and implementation of these action recommendations. Any such procedure, if adopted, should probably be reflected in a revision of the Mission Evaluation Order.

(2) Focus primary attention on the interpretation of available data.

The current ratio of data collection to data analysis is much too high. Unless more attention is focused on the interpretation and use of such data, any efforts to expand data collection are likely to be viewed skeptically and to be of limited value from a management perspective. The best way to initiate improved analysis and use of program impact data is to emphasize and institutionalize what we would term the "so what?" and "how do you know that?" functions within the Mission. While we suggest that these functions be formalized in certain job descriptions within the Mission (see recommendations 6 and 7 below), it is equally important that Mission management re-emphasize their concern with these issues on every possible occasion. Often the necessary data seem to be available but (with the exception of expenditure and some output data) reported only as raw data, presumably intended to satisfy some accountability obligation.

(3) Emphasize program information only in those areas where the Mission or GOP is able and willing to make program-level management decisions.

The ten problem areas addressed by USAID/Pakistan differ substantially from one another in this regard. In several, there is neither now nor likely to be any individual responsible for managing against the stated objective. This is most obviously the case with regard to those objectives that cross sectors, but also applies in certain sectors (such as agriculture) where the relationship among projects is more intellectual than operational.

Efforts to develop and use impact indicators at the project level are probably useful in all cases, but the value of extending this analysis to the program level depends on the real significance of the stated program level objective as a focus for Mission efforts and/or external reporting; the plausibility of using a common yardstick or analytical framework across projects; the feasibility of using available information from one project to assess or improve another; and the ability to find an appropriate locus for the needed monitoring and decision-making. Within the current portfolio, program information systems are likely to be most straightforward in Energy, Population, Child Survival, Primary Education and Narcotics. Program level analysis of expenditure and implementation appears to be increasingly well in hand. More difficult, but potentially exciting areas include Domestic Resource Mobilization, Key Institutions and Lagging Areas.

Other areas not included explicitly in your Action Plan which could be addressed at the "program level" include Policy Reform, Natural Resource Management and Women in Development. It appears that it would be feasible to monitor each of these areas were the information deemed of sufficient importance to warrant the effort involved. In our view, program level monitoring of Balance of Payments and agricultural productivity should probably be limited to the tracking of major national trends in each of these areas.

Attachment 2 provides some initial ideas about program level information system for each of the Mission's major areas of activity.

(4) Project level information system should be the source of most of the required program level data and a substantial portion of the analysis of that data.

Creating separate data collection or analysis mechanisms outside the current project framework should be viewed as a course of last resort and kept to a minimum. The reasons for this recommendation are at least three. First, in the case of this portfolio, most of the information needed at the program level

relates to output or purpose level effects of projects or to their secondary effects. Secondly, one of the major benefits of program level monitoring, namely focusing project officers' attention on the effects of their projects on overall Mission objectives, would be lost or diluted by transferring responsibility for monitoring these effects to some central authority. And finally, making extensive use of projects for data collection and analysis makes it possible to take fuller advantage of project funds and contractor personnel for this purpose. A preliminary review of the Mission's portfolio suggests that scope and resources exist within most projects for carrying out these tasks, if requirements could be kept to a minimum, communicated clearly and not changed too frequently. A corollary of this recommendation is the importance of placing greater priority on collecting and using information that is perceived by project officers as being of direct use to them.

As part of the consultancy, somewhat detailed discussions were held with project officers regarding the implementation of improved information systems in two areas -- energy and primary education. These discussions further underline the observation cited above regarding the value and importance of focusing information improvement efforts initially at the project level. The monitoring plans that emerged from these discussions are presented as Part II of this report and are illustrative of the type of monitoring plan FDM might assist other projects in formulating. It should also be noted that, on average, the preparation of these plans required approximately 2-3 person weeks of professional time on the part of the outside "consultant", and would require significantly more involvement were they extended to include sample frames, data collection instruments and the like.

(5) Clear allocation of roles and responsibilities requires special attention.

In order for any system of the sort suggested here to succeed, there must be a "point person" for each of the program areas to be monitored. This individual or Office would, as a minimum, be responsible for assembling, interpreting and reporting information on performance in the stated area. In many cases, this same individual would also have responsibility for recommending or taking program level decisions based on that information. Based on our understanding of the current portfolios, staffing and responsibilities of various Offices, we would suggest that the locus of such responsibility be as follows:

<u>Area</u>	<u>Responsibility</u>
1. Balance of Payments	Program Office
2. Domestic Resource Mobilization	Program Office
3. Agricultural Productivity	ARD (Agriculture)
4. Energy Deficits	E & E
5. Population	HPN
6. Child Survival	HPN
7. Primary Education	HRD
8. Improvement of Key Institutions	PDM
9. Lagging Areas	ARD (Rural Development) or PDM
10. Narcotics	ARD (Rural Development)
11. Project Implementation & Expenditure	PDM
12. Policy Reform	Program Office
13. Natural Resource Management	PDM
14. Participation by Women	PDM

PDM, as part of its effort to assist projects in developing monitoring plans, should help to assure that these plans are developed in ways that facilitate the collection of the necessary information in a simple and consistent manner. As suggested above, much of the actual data collection and analysis can and should be transferred to contract teams. Program Office would continue to have the responsibility for assembling and interpreting the information for major reviews of the Mission's impact and strategy.

We would recommend that PDM, in collaboration with the Technical Offices, be responsible for using the available information to prepare 2-3 page semi-annual project briefing memoranda on each project and one-page "Issues Papers" to guide semi-annual portfolio reviews. A 2-3 page synthesis of "purpose level progress" and major outstanding issues should then be prepared at the office level as a guide to these reviews. There might also be an effort to experiment with certain of the cross-cutting concerns listed above as an alternative means of organizing and conducting these reviews. In those cases where performance information above the output level is unavailable for such reviews, the absence of such information would be raised as an "issue" at both the project and the office levels.

The role of Mission management would be to continue asking for such information where it doesn't exist and to ensure that the information that is provided is put to meaningful use. The rule of thumb on information of this type should be the same one used in managing a wardrobe--if you haven't put it to good use in the last year or two, throw it away!

(6) A minimum of two additional local hire positions should be added to manage the additional workload implied by this system.

The first such position should be in PDM. Initially, this individual's primary job would be helping project officers to develop and initiate monitoring plans adequate to meet current requirements (for data on expenditures, inputs and outputs) and the expanded requirements implied in collecting data above the output level. Subsequently, this individual (or his or her successor) would become the PDM "point person" alluded to in recommendation 5 above. This might or might not be the same person PDM currently expects to hire to help project officers compile data on project inputs and outputs.

A second person would most logically be located in the Program Office. This person, whom we would term the "so what" person, would be responsible for helping to pose and address strategic and program level issues using whatever empirical data is already available or can be assembled relatively easily. Something of an in-house social scientist and program information specialist, this person's responsibility would be to collect, compile, in some cases generate, and help interpret the information needed to address major issues of project and program impact for use in Action Plans, semi-annual policy dialogue exercises or other strategic planning exercises. As with the PDM position, this individual could presumably be hired locally, but would need to be quite experienced and broad-based with regard to data analysis, program assessment and development assistance programs.

(7) The improved collection and use of project and program impact data should be used wherever possible as an opportunity for institutional strengthening within the GOP.

Many of the indicators suggested in the Action Plan and at the purpose level of project documents correspond to areas of major policy relevance and interest to the GOP. In several cases, USAID's program objectives correspond directly with the Government's sectoral or sub-sectoral goals. Under such circumstances to look upon data generation, analysis and interpretation as unilateral USAID concerns would be to miss an excellent opportunity for strengthening the use of management information in the relevant parts of the government. In many cases this point is recognized within the current portfolio, but the opportunities for stressing and improving host country information systems as an explicit project output increase significantly when USAID monitoring moves above the level of projects' inputs and outputs.

Where future Mission action calls for regular generation and analysis of additional impact information, each such effort should be viewed as an opportunity to strengthen host country institutions, and information-based decision-making.

Parenthetically, it might be noted that such improvements are often of interest to several donors involved in a given sector or problem area particularly when policy issues are involved.

(8) Any changes made in current information systems should be introduced incrementally.

This gradualism is occasioned by people's pressing workloads as well as the desirability of proceeding initially on a somewhat experimental basis. Criteria for choosing where to begin include the importance of the program or issue, the feasibility of performing the necessary data collection and analysis, the probability of the additional information influencing significant decisions, and the enthusiasm of the individuals involved. Based on these criteria, we would tentatively suggest starting with two or three areas. We would also strongly recommend beginning at the project level in most areas. There is much to be done at this level, projects are currently much more "real" to Mission staff than programs are, and much of the program level data will necessarily come from the project level in any event. Any such project exercises should be undertaken, however, with an eye on the relevant program level issues and indicators.

(9) A limited program of external technical assistance should be considered in helping to initiate and sustain some of the procedures suggested above.

The activities called for can and should be undertaken primarily by Mission staff. Technical assistance should be confined to one training activity covering perhaps three or four half-days for interested project officers, program office personnel, host country and counterpart personnel; and a series of brief consultancies as needed to assist Mission personnel in establishing monitoring plans, collecting and analyzing the available data, and developing additional procedures for utilizing performance data at both project and program levels. No effort would be made to achieve total or uniform coverage of the Mission's portfolio during this period. Emphasis would be placed on those projects and programs where the incremental value of the information most obviously outweighs the energy required to provide it. It is suggested that the effort be seen as entirely experimental, and modified as needed when or if its results fail to meet expectations. If, after 18 months of trial the results are still not tangible and widely perceived as worthwhile, the effort should be terminated.

If more detailed assistance is needed for developing or implementing, monitoring and evaluation procedures for specific projects, it is recommended that the need for such assistance be reviewed on a case-by-case basis and that any such assistance be funded out of project budgets.

## II. Monitoring Progress Toward Program Level Objectives: Examples from Energy and Education

This section offers examples of the types of data-related activities that can generate information for program level monitoring. As discussed earlier, many of the Mission's large, multi-component projects, progress toward their purpose level objectives essentially monitors program level performance. The activities also begin to fill the gap between the financial expenditure/input/output data that PROMIS provides and infrequent assessments of project performance that interim evaluations provide. In short, these activities should assist project staff to monitor and evaluate the results of their projects on an ongoing basis.

Energy and primary education were selected to illustrate how project monitoring systems could be improved to generate information on purpose or program level accomplishments. As examples, these activities should also suggest how similar monitoring and reporting systems could be developed for other program areas, such as agriculture, rural development, health and population.

At this point, the activities discussed below constitute only a preliminary plan for improving project information systems. In most instances, further work involving senior Mission management, project officers, technical advisors and GOP counterparts is needed to reach a common understanding on the type of information needed and to agree on specific monitoring activities, reporting formats and schedules to formulate more complete project information plans.

### A. Energy

#### 1. Program Level Monitoring

According to the Mission's Energy Sector Strategy Paper (November 1988, draft), the overall objective of the Mission's energy program is to "contribute to a reduction in excess energy demand by facilitating least cost supply increases, while at the same time working to ensure more efficient delivery mechanisms and consumption patterns". Key elements of the program include:

- resource transfers in the form of capital development of power plants and funding for a private sector energy fund;
- policy dialogue focusing on tariff reform and rationalization of pricing among consumers and between WAPDA and KESC;
- donor coordination on policy issues and co-financing of energy sector development activities;

- institutional development designed to improve the efficiency with which energy resources and systems are developed and managed;
- private sector participation in the development of energy resources and the production of power; and
- resource development focusing on exploration to identify indigenous energy sources, enabling Pakistan to develop its energy sector in a more rational and efficient manner.

According to the Strategy Paper, the program should contribute to economic growth by mitigating balance of payments problems, inadequate domestic resource mobilization, low agricultural productivity and Pakistan's energy deficit. The conceptual linkage of the Mission's energy program to these development problems is certainly plausible. For example, more efficient management and distribution of electricity in rural areas could increase the supply available for irrigation pumps, contributing to increased agricultural productivity.

As a practical basis for monitoring program performance, tracking the impact of the energy program at the level of balance of payments or agricultural productivity is too far removed from the individual and collective short-to-medium-term effects of the Mission's energy projects. Numerous other factors influence these same development constraints. Isolating AID's contribution via its energy program would be very difficult (if not impossible). Moreover, the time lag between project outputs and their impact at this macro-level is too long to permit periodic (e.g., quarterly) monitoring of progress toward project/program objectives.

The key strategy elements cited above--i.e., resource transfer, policy dialogue, donor coordination, institutional development, private sector participation, resource development and technology transfer--define types of information needs for program monitoring. Several can be eliminated. Donor coordination is an approach the Mission plans to follow in the development of its program. Resource transfer can be viewed principally as an input to the program and technology transfer as an output. The remaining elements - policy dialogue, private sector participation, institutional development, and resource development - constitute core areas of project activity that directly relate to program objectives. In other words, these are areas where the Mission is specifically targetting resources to develop the energy sector. In turn, they should have highest priority in monitoring project and program progress.

These four program elements also underlie specific objectives cited in the Energy Strategy Paper: (a) electricity and gas tariff reform; (b) increased domestic energy development; (c) more electricity in rural areas; and (d) improved energy

production, conversion, distribution and end-use efficiency. Achievement of these specific objectives will depend on the progress the Mission makes in policy dialogue, private sector participation, institution building and resource development. The task of designing information activities for these four areas is simplified somewhat by the nature of the Mission's energy projects. Rural Electrification, Energy Planning and Development and Private Sector Power are multi-component, umbrella projects that are sufficiently broad and encompassing that they can be viewed as energy programs. These projects also articulate objectives within the four program areas that can be monitored. Consequently, information on progress toward the purpose-level objectives of these projects is equivalent to monitoring progress at the program level.

Two program strategy elements--resource development and private sector participation--fall largely within two projects--Energy Planning and Development and Private Sector Power, respectively and can be dealt with through the monitoring systems of these projects. Similarly, institution building is an important objective and main component in each of these projects. In large part, institutional development constitutes the fundamental issue for project and program monitoring. Being able to monitor these program elements and objectives within the context of a project permits using project resources and eliminates the need for additional, special data collection and analysis activities.

Though each of the projects contribute directly or indirectly to the policy dialogue process, policy reform is not an explicit project condition or project component as institutional development is, for example. Policy dialogue cuts across the energy projects; therefore, tracking progress within this program area will require monitoring outside of any one project.

## 2. Policy Dialogue Monitoring

Policy reform in the energy sector is germane to major donors' programs in Pakistan. Ongoing studies and discussions with the GOP by the World Bank, the ADB and AID generates considerable information on energy policy constraints. Overall trends in domestic energy production, energy production, growth in demand, fuel imports, foreign exchange expenditures for energy, etc., are largely monitored in this process and are available to the Mission. Though this provides important information about the policy environment, more specific monitoring of policies that the Mission is most involved with would be useful for program management.

The policy issues the Mission gives highest priority and devotes most resources to should be tracked by the Energy Office. A listing of major policy and related institutional reforms that are most central to the Mission's support for policy reform would

be needed. Benchmarks for each reform should be developed and a "progress briefing" (e.g., 2-3 pages) discussing reform actions vis-a-vis the benchmarks, progress over the past six months, anticipated next steps, impediments to enactment, etc., should be prepared for senior Mission management on a quarterly or semi-annual basis.

### 3. Energy Price Monitoring

Energy pricing tariff reform is a key policy issue in the Mission's energy program. Price increases and price rationalization among consumers are fundamental to energy demand management. Progress toward peak demand reductions, restraint of growth in energy demand, encouragement of energy conservation, improvement in the allocation of energy to the most productive users and increased revenue generation is largely dependent on pricing policy. Given the importance of pricing policy, monitoring changes in some detail seems warranted.

Energy prices for electricity, natural gas, fuel oil, etc., converted into real prices and, where relevant, expressed in relation to production costs, would track progress toward real increases in energy pricing. Rationalization of energy cost among consumers, and in particular, reducing or eliminating the subsidization of agricultural and resident users at the expense of industrial users, should also be monitored over time. Other types of pricing analysis and tracking might also be considered. Though improvements pricing policy are not exclusively attributable to AID, it is a major contributor to the process and improvements do reflect program accomplishments. Updated annually by Program Office economists, energy price monitoring could contribute to the Mission's annual policy meetings with the GOP, highlighting problem areas that need greater attention over the coming year.

### 4. Project Purpose/Program Objective Monitoring

The bulk of information on the progress being made by the Mission's energy program will come from project information systems. The following sections suggest some relatively simple activities that projects could undertake. The principal focus of these activities is on institutional development, since that is a major objective of these projects. A semi-annual "project briefing memorandum" of one to two pages discussing progress (or the lack thereof) toward institutional development objectives is suggested as a means for reporting to Mission management.

a. Energy Planning and Development (EP&D)  
AID Funding: \$105m PACD: 7/31/91

The purpose of the Energy Planning and Development (EP&D) project is to assist the GOP to develop the institutional capabilities and information bases needed to assess, develop, and use energy resources efficiently. The project consists of three major components, largely providing technical assistance and training:

- Energy Assessment and Manpower Development which supports the strengthening of the Energy Wing within the Ministry of Planning and Development (MPD) to conduct economic analyses for energy sector planning and policy formulation;
- Coal Resource Assessment Development which provides: (a) assistance to the Geological Survey of Pakistan (GSP) to identify and assess Pakistan's coal reserves, (b) feasibility studies needed to develop the Lakhra coal reserves, and (c) assistance to develop coal briquetting technology and marketing of briquettes; and
- Conservation and Renewable Energy Technologies which supports the establishment of the National Energy Conservation Center (ENERCON) in the MPD to promote energy conservation practices and explore the feasibility of renewable energy technologies for application in Pakistan.

b. Energy Analysis and Manpower Assessment (\$10.8m)

Considerable progress has been made toward improving the GOP's energy planning and policy development by strengthening the Energy Wing of MPD. Various studies and analyses, as well as project appraisals, have been completed, are underway or are planned. An energy data base and software for analytic work are managed and used routinely by Energy Wing staff. The number and quality outputs being produced has clearly increased during EP&D. The key questions now is what utility these products have and whether the Wing can continue to operate at this level of performance when the project terminates.

The July 1988 evaluation raised similar questions about the work of the Energy Wing. The evaluation found that the GOP considered less than half of the studies completed to be useful (though the Wing's staff attributes this in part to inter-governmental rivalries). As the evaluation report rightly observes, the important point is that the Energy Wing's work influences decisions and that being effective within the political environment that the Wing must operate is as important as the quality of work produced (page 29).

There are examples of where the Energy Wing's work has had utility. Assisted by the technical assistance team, the Wing contributed to the energy sector portion of the Seventh Five-Year Plan. The Wing also prepares an annual energy plan and reviews proposals and funding requests submitted by WAPDA and KESC as part of the GOP's budgeting process. However, there is no routine monitoring of the immediate and subsequent uses of other Energy Wing's products. Tracking utilization over time could be a key indicator of progress toward institutionalizing an effective analytic and planning function for energy in the GOP. EP&D should track all major products of the Energy Wing beginning with initial planning through completion and utilization. Even though EP&D assistance may not be involved in every product of the Energy Wing, it is important to maintain a complete inventory since the purpose of the assistance is to develop a viable and effective organization. The system might contain the following:

- product (study title)
- purpose and intended user(s)
- status (planned, underway, completed)
- date initiated
- date completed
- contracted out, in-house, combination
- cost (beyond normal operating expenses)
- principal or initial user of completed product
- how the product was used and relative importance (e.g., what did it influence)
- subsequent user(s) and relative importance
- if not used, why

The Energy Wing, assisted initially by the TA team, should maintain the system, updating it on a monthly basis. The system should include the existing proposals for private sector energy projects that the Wing reviews, as well as those generated by the Private Sector Power Project. Knowing that there was at least one major use of product is most important. Monitoring subsequent uses may not be comprehensive; some uses will occur without informing the Energy Wing, other users will contact the Wing's staff for further information. What will be missed by this tracking system are the Energy Wing's routine line functions. Much of the the Wing's work may not result in an identifiable product, yet these activities should influence GOP energy policies, budgeting and investments. Some discussion of these functions and their influence on GOP decision making concerning the energy sector could be included in the TA team's quarterly reports.

Institutional development can also be monitored in respect to the work of the technical assistance team and the Wing's staff. A standard question in technical assistance projects is the degree to which work is performed by the TA team versus the unit's permanent staff. Progress can be monitored by changes in the

role of the TA team, from initiating and conducting studies and analyses to advising and backstopping work undertaken by the unit's staff. Though not quantifiable in any sense, this process can be monitored and reported on the basis of key indicators, such as the source of ideas for studies, planning work, conducting the analyses, presenting results and following up on the use of the unit's work. The TA team could include a paragraph or two in its monthly or quarterly reports discussing this issue. (This type of reporting is also possible for the other energy projects as well.)

c. Coal Resource Assessment and Development (\$24.3m)

The Coal Resource Exploration and Production sub-component (Coal REAP) provides assistance from the U.S. Geological Survey (USGS) to the Geological Survey of Pakistan (GSP). The resulting information will enable the GOP to lease its reserves on a more rational basis. More significantly, the information could be an important step toward a more complete assessment of the development potential of coal reserves if additional types of information about the reserves were to become available. USGS' assistance should also strengthen the capacity of the GSP to continue exploration and identification of coal reserves, establish and maintain geological data bases and make such data available for energy development planning and investment.

The potential importance of this information to developing Pakistan's coal resources, or at least making a reasonable assessment of the economic viability of such investments, is clear. However, linking this information directly to the development of Pakistan's coal reserves and monitoring this on some periodic basis is problematic. Geological data on coal reserves are only one among many types of data that will influence decisions about coal resource development. Whether such development occurs is not an accurate measure of the achievement of Coal REAP's objectives. Simply the use of the data, irrespective of the outcome, may be the most realistic indicator of purpose-level accomplishment for this component. If the information is published (in itself, a good thing), monitoring use and what difference it made would be difficult at best and probably not worth the effort.

Whether other products of the GSP can be monitored, analogous to the Energy Wing, should be considered by project staff in developing EP&D monitoring plans. At a minimum, periodic reporting on the GSP's capabilities is possible.

Coal Briguetting is still at a developmental stage; monitoring purpose-level accomplishments should be considered when a marketable briquette is ready for production and use.

d. National Center for Energy Conservation and Renewable Energy (\$17.3m)

The overall objective of this component is to increase energy efficiency and use, and to assess and develop renewable energy technologies. Development of a national energy conservation program, an energy data base and a national renewable energy assessment program are envisioned as contributing to this objective. The conservation program and the energy data base are to be developed by a new organization created with EP&D assistance--the National Center for Energy Conservation (ENERCON) in the MPD.

Linking project activities to measurable gains in energy efficiency throughout Pakistan is not a practical basis for monitoring ENERCON. However, the functions and services of ENERCON provide a means for monitoring progress toward developing an institutional capability to encourage and support energy conservation and renewable energy technologies.

ENERCON is a new organization and not yet fully staffed. Monitoring progress toward institutional development obviously has to be restricted to ENERCON's principal activities to date. As additional services or functions are started or expanded, monitoring activities could be developed as needed.

Two important activities of ENERCON are energy audits and training workshops. A simple indicator of the demand of ENERCON's services could be a monthly count of requests for services and applications to attend energy workshops. Compared to the actual services provided and the number attending workshops, an estimate of unmet demand could be estimated to encourage private firms to provide these services.

Ninety-five preliminary audits (1-2 day assessments) and 42 detailed audits have been completed and more are planned. Plant managers appear to be most interested in recommendations that result in quick savings; boiler and furnace tune-ups offered free of charge exemplifies this. The point of the audits, however, is not a one-time intervention. Rather, the audits should lead to an ongoing program of energy conservation throughout the plant that results in reduction of energy consumption and cost savings. As the July 1988 evaluation notes, ENERCON needs to move ahead with plans to follow-up on its audits. ENERCON now has an evaluation staff person who is currently developing a work plan along these lines.

One approach is to re-visit each of the plants that have received an audit to assess how effective this service has been, how it can be improved, whether plant managers are maintaining energy improvements (e.g., periodically re-tuning boilers to maintain efficiency), and the demand for energy conservation services

(including financial constraints to major improvements and a willingness to pay for these services). However, as the number of industry audits grows, follow-up will need to be conducted by mail, telephone interviews and/or on a sample basis for re-visits.

Assessment of the utility of the training ENERCON has been conducting is also needed. Some two thousand individuals have attended ENERCON workshops. A register of these individuals should be maintained by ENERCON and on a sample basis, data on how effective and useful the training was should be collected from both the worker who attended the workshop and the employer. This could be conducted periodically, perhaps twice a year, three or four months after a set of workshops, via a contract with a local survey research firm.

An important issue to be addressed is the soundness of ENERCON's strategy of working directly with individual firms and whether there are any indirect effects on energy conservation from such direct assistance. Direct assistance to firms is obviously necessary to initiate the energy conservation program. But over the longer-term, such direct "retailing" of energy conservation services by ENERCON is questionable. In other words, there are too many firms to assist each separately, hence ENERCON's interventions need to have a broader effect on promoting energy conservation than the specific improvements made by ENERCON's clients.

One indirect effect could be adoption of energy conservation improvements by other firms--e.g., the cost savings demonstrated by an industry assisted by ENERCON may encourage or force a competitor to follow suit. This becomes more likely as ENERCON's newsletters and other publications become more widely distributed. However, such indirect effects might be difficult to monitor because there is no readily accessible source of data on this. One approach is to contract for highly focused, special studies of selected industries assisted by ENERCON to explore whether and, if not, why not, such indirect effects occur.

A second important indirect (possibly direct) effect of ENERCON's services might be the growth of an energy conservation industry. Demand for these services should grow as consciousness about the cost savings possible with energy conservation increases. ENERCON's energy data base should include (if it doesn't already) statistics on firms providing energy conservation services. Individual records on firms might include name, owner, address, number of employees, types of services, and business volume (though private firms might be reluctant to report accurate sales data to a government organization). ENERCON could contract for the initial development of this data base. Data on the energy conservation industry combined with statistics on importation and domestic production of energy conservation materials and equipment, expenditures by industry for energy conservation

services and materials, and energy consumption data analyzed annually would provide information on monitoring overall progress.

As with the Energy Wing monitoring data, ENERCON project staff should use the above information for both internal project management purposes and for periodic briefing reports for Mission management.

e. Rural Electrification - AID Funding: \$250m - PACD: 9/24/92

The overall objective of the Rural Electrification project is to assist the GOP to develop reliable and efficient electrical service in rural areas and to reduce the current shortfall of electrical generating capacity. A major element of the initial project was the construction of the Guddu power plant; at this point, AID's assistance is near completion. The remaining four institutional development components are: (a) institutional strengthening of the distribution function with WAPDA; (b) establishment of a distribution function training program; (c) an energy loss reduction program; and (d) design and implementation of a rural electrification system expansion program.

A comprehensive set of planning, management, organizational and operational changes are planned to improve WAPDA's management of power distribution. In addition to operational changes, the separation of generation and transmission from distribution, designed to increase internal accountability and responsibility within WAPDA, will be further institutionalized. Moreover, organizational changes are underway or planned throughout WAPDA at all levels, affecting the Area Electricity Boards, circles and divisions.

The work plan for the next TA contract covering 1/89 through 12/91 details numerous changes to improve the operation of WAPDA's power distribution and system expansion. Institutional reforms planned for the remainder of the project will affect personnel training, administrative recordkeeping, recruitment, promotion procedures, job descriptions, financial procedures, procurement and management of supplies, inventory management, customer services management, billings and collections, and various other administrative changes.

Monitoring the effects of these changes on WAPDA's operating performance will be essential. For example, considering just the organizational changes, it is possible that this could be subverted by those opposed to the changes that renders the activity little more than an organizational shell-game. Functions and lines of responsibility are moved here and there with little, if any, genuine improvement in the management of the system or in the service provided to users.

Alternatively, organizational changes at the division level may initially result in a worsening of services during the period when units and workers take on new roles and responsibilities. It would be useful to know if that is the case and if so, what mitigating measures might be taken. In short, monitoring systems are needed to determine whether these various changes within WAPDA result in improved power distribution, reduced energy loss, more rationale expansion of the system and overall improvement in WAPDA's performance.

A limited set of quantitative indicators measuring WAPDA's operating performance could monitor these improvements. Project staff and WAPDA should establish which indicators to track, but the critical point is to pick indicators that reflect the cumulative or combined effects of these changes. The following are possibilities:

- (1) Overall operational performance:
  - frequency, extent and duration of load shedding
  - distribution system losses
  - number of trippings per 100 K.M.
  - number of customers per WAPDA division worker
- (2) Quality of system maintenance and repairs:
  - number of transformers damaged and repaired
  - the number of work orders submitted and completed
  - the percentage of work orders submitted for A.I.D. fixed amount reimbursement rejected for failing to meet quality standards
  - the percentage of work orders executed but rejected for reimbursement for failure to meet quality standards
- (3) Financial management improvements:
  - collections as a percentage of billings
  - the value of arrearages
- (4) Customer service
  - the average time delay between application for and connection to the system by category of user (residential, industrial, agricultural)

A time series of these indicators (e.g., a table containing the indicators for each reporting period) would help to clarify whether overall progress is occurring or not, whether the various organizational and administrative changes are actually making a difference and where problem areas remain. A first step is to determine the availability and reliability of WAPDA's data for

performance indicators and make improvements if necessary. Ideally, the data would be available on a semi-annual basis disaggregated by at least the eight Area Electric Boards (permitting comparative assessment of improvements among the AEBs).

One key indicator that deserves serious consideration is calculating operating expenses/KWh at the division level. The amount of effort this might require could be so substantial that it is impractical. On the other hand, short-term assistance could be obtained if needed. Assuming this can be done, O.E./KWh would provide single measure of the efficiency gains that much of the technical assistance is designed to affect. A definition of what constitutes operating expenses needs to be established -i.e., what does or does not constitute an operating expense for the computation. This measure could also be used to monitor the immediate and longer-term effects of organizational changes at the division level. Comparisons among the three main categories of divisions would be possible. Further, comparisons within categories between divisions that have been reorganized and those that have not would also be possible. At the very least this would provide information useful for managing the reorganization process and for broader programmatic purposes, e.g., expanding the system in the most cost-efficient areas.

As in preceding projects, periodic analysis of this data and a brief summary of what the results mean in respect to project objectives should be produced for project and mission management.

f. Private Sector Power - AID Funding: (\$170m - PACD: 9/30/98)

Private Sector Power has the potential for being either AID's most significant intervention to assist Pakistan to meet its energy requirements or its most significant failure. Policy and institutional issues will be of utmost importance. A major responsibility for the Mission is supporting the institutional requirements of the project. AID will provide approximately \$22 million for technical assistance; this is expected to be sufficient to cover the total funding of the project by all donors, estimated at approximately \$550 million. In other words, AID is responsible for supporting the institutional process needed for the interface between the private sector and the GOP in reviewing and negotiating energy proposals submitted by private firms. Though actual private sector investment resulting in additional power for the country is clearly the single most important criterion for success in this project, the institutional capability and process that is required for this to happen is also a significant objective.

Though the project has not yet started, it is not too soon to begin thinking about basic monitoring systems needed for project and program management. The project paper briefly describes some basic monitoring activities. What should be considered is a tracking system that follows each proposal through the process of review and negotiation. For example, a proposal would enter the system when submitted to the GOP. As a proposal moves through this process, the tracking system should update its status on a monthly basis, recording where the proposal is currently located, what action is needed and who the responsible individual(s) is in that unit who must clear the proposal for it to move on to the next step. On a monthly basis, a printout of a table listing the proposals and their status accompanied by a brief write-up discussing progress, improvements and problems could be produced.

The project paper outlines a likely sequence of GOP agencies that a proposal will pass through for review, and if a letter of intent is issued, negotiation and approval. Precisely what this sequence/process will be is still somewhat unclear, complicating the task of developing the tracking system. However, the ADB is currently funding Coopers and Lybrand to produce procedural manuals for the Ministry of Water and Power and the National Development Finance Corporation - two key organizations in this process - that should help to clarify the process. Further clarification might be found in reviewing the process that thirteen proposals already submitted to the GOP have gone through so far.

A second complication is estimating the pace at which proposals should move through the process. Again, the thirteen proposals might provide some insight into this; discussions with GOP officials involved with the review and negotiation process might also help. It would be useful to have some estimate of time requirements to assess how well the process is working, whether a proposal is being unnecessarily delayed and whether the process is showing improvements over time. The PSC project manager that will be hired for the project should explore these issues further to develop the system.

The tracking system should serve several purposes. Its monthly updates should assist in expediting proposals through the review process. A proposal kept unduly long at one stage in the process will become apparent. Over time, the bottlenecks in the system will also emerge, directing management attention to resolving the problem. Over time, the tracking system should show whether the capacity of the GOP to come to a decision on proposals, either rejection or approval is improving, where the process tends to break down and where further assistance might be needed. The PSC project officer should also prepare periodic (e.g., quarterly or semi-annual) briefing reports that include some assessment of how well the process is working and where problems remain.

## B. PRIMARY EDUCATION DEVELOPMENT

### 1. Overview of Education Sector

The USAID/Pakistan Primary Education Development Project (PED), scheduled to be submitted to AID/W for review in April, 1989, is the Mission's first attempt to address primary education needs in Pakistan. Although technically a project, the size of this undertaking, with six major sub-components, and the funding level of an estimated \$280 million lend themselves to considering this project as an educational program for the Mission.

The purpose of the project is to achieve significant improvements in: policy formation/management; access to schooling, especially for girls; quality of schooling and student performance; and efficiency of the educational system. The project sub-components are: instructional materials; teacher training; incentives for teachers, students and for community participation; educational administration and support; construction and rehabilitation of schools; and research and development. At this point the Mission has not drafted an educational strategy statement. The project does, however, address two objectives identified in the CDSS. These are: a) increasing the primary enrollment ratio, and b) integrating lagging areas.

This section has a two-fold purpose: a) to outline for the USAID/Pakistan a management information strategy which will assist it to track its progress toward these two CDSS objectives using data to be generated by the PED project, and b) to demonstrate the utility of an information strategy in managing implementation of the project.

### 2. Purpose of a Management Information System

The management information strategy described below will have several uses. A priority function in the case of this project should be as a management tool for the Project Officer. The Primary Education Development Project has an ambitious research agenda which actually begins before the PP design and carries through the entire life of the project. This is particularly appropriate for this project which will test various hypotheses to determine ways to improve female participation in education. Because of this orientation, the project will be continually testing approaches, sampling, and sponsoring research.

However, because of its size, and because in addition to its "research" aspects it also has other components such as a large \$80 million rehabilitation and construction component, a system needs to be established early on to help the Project Officer manage all the research, surveys, tests and pilots to assure (1) that they are done in a timely manner, (2) that analysis of the studies, etc. is carried out promptly, and (3) most important,

that results of these efforts are fed back into the project effectively so that it can learn from them and adjust accordingly. The primary goal of this strategy, therefore, should be to help the Project Officer manage his project information.

A second important goal, however, is to provide information to the Mission which will help it assess the impact of its portfolio on the problem areas identified in the CDSS. This report will first attempt to lay out some sector level objectives for education, and then establish indicators which could help to measure performance or progress made towards achieving these objectives. The report will then identify the information which will be generated by the project; discuss methods for collecting this information, where necessary; pinpoint the relevance of the data for project management; and indicate how data to measure progress toward program level indicators can be tracked.

a. Objectives to Be Measured in Primary Education:

Although the PED is technically considered a project, as is true for many projects at USAID/ Pakistan, its proposed size (\$280 million) and complexity suggest that it be considered as a program. The indicators listed in the CDSS for this problem are: a) increase rural primary enrollment to 70 percent for boys and 40 percent for girls, b) improve the qualifications and training of primary teachers, and c) rehabilitate and construct primary schools. These indicators should be recast slightly for the following reasons: the first is an appropriate country performance indicator which can be tracked by the Mission, but there is no direct relation between AID's projects and this goal.

For Mission purposes it would be better to rephrase this as "increase primary school enrollment of school aged children in Baluchistan and NWFP from 35% and 10% in Baluchistan and 55% and 23% in NWFP to 75 percent for boys and 50 percent for girls by 1999". A second indicator the Mission could also track would be the increase in primary school completion rates in Baluchistan and NWFP from \_\_\_% for boys and \_\_\_% for girls to \_\_\_% and \_\_\_% by 1999.(1) The other two indicators now listed in the CDSS address questions of educational quality. However, they are really project level indicators, or outputs. A measure for the program which addresses improvement in educational quality and which could be tracked would be (3) parity in grade five achievement rates between Baluchistan, NWFP, and the other two

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(1) The first year survey will establish baseline data for this indicator. Goals will be established during PP design, scheduled for early spring, 1989.

provinces. (2) The Mission should provide 1988 figures for each of these three objectives and then, based on the PED implementation plan, should establish annual benchmarks it hopes to achieve.

A second program level objective for which the PED and other Mission projects could provide data is the hypothesis that literacy is an important factor in attaining equitable economic growth and improved social services. Various projects in the Mission's portfolio such as the child survival project, population planning, fertilizer project, irrigation project should be able to track, as part of their information systems, the literacy of their users. The correlation between literacy and the interest in or utilization of these various social services would provide the Mission with valuable data which could be of use in policy dialogue in further meetings with the Ministry of Education.

b. Objectives to Be Measured in Integrating Lagging Areas

Since the PED also addresses itself to the problem area of integrating lagging areas, it should also contribute quantifiable information to measure progress toward that objective. There are two measures identified: a) to overcome isolation by providing physical infrastructure that the GOP could not provide alone, and b) to increase the supply of trained manpower

On a yearly basis, the PED should provide information to the Program Office (if they are the ones tracking this) on numbers of primary and middle schools for boys and girls, numbers of female teachers trained, and numbers of boys and girls completing primary school.

3. Tracking Program-Level Indicators for Primary Education

a. Methodology:

As mentioned at the beginning of this report, during its life of project, the PED will produce a series of over 20 research reports. In addition, five studies are now ongoing, and another 7 or so will take place during project design ( Jan-March, 1989). The project also intends to establish an Education Management Information System (MIS) in Baluchistan and NWFP; this will probably be nationalized by the project before its completion. The MIS will consist primarily of an annual survey plus information generated by province and district level administrative records, although it will also ultimately incorporate findings of studies: (2) This is subject to Mission review and could be dropped, as it is not related to the objective of increasing school enrollment. Incorporate findings of studies and other research carried out on behalf of the educational system. administrative records, although it will also ultimately include the studies and research undertaken by the project as well.

and other research carried out on behalf of the educational system. The studies and research will generate valuable information needed to fine-tune the project, by assessing present training methods, curriculum, making suggestions for improvements which are intended to raise the quality of teaching as well as ways to attract and retain students at the primary school level, etc. In short, the studies and research will provide data to help the project meet its objectives; however, it is the MIS which will generate the information needed to measure program level goals.

Unfortunately, the MIS will probably not be in place and functioning until several years after the project begins and the technical assistance is in place. As the MIS does become functional in provincial offices, the project will phase over to it the survey, administrative record examinations, and management of the research component. In the meantime, a project of this size should have a functioning monitoring system in place to provide baseline data, and to begin tracking progress. This will also be an invaluable tool for project management.

The Project Paper should therefore include plans for an annual survey to be conducted in Baluchistan and NWFP. This survey should begin in 1989 and be conducted on an annual basis, being gradually phased into the two provinces' MISs as they are institutionalized. The sample should cover a representative number of schools in the two provinces, including those in the World Bank project and those being assisted by other donors. The sample should be stratified to indicate other donors and should indicate at a minimum urban areas, rural areas, primary schools standing alone, primary schools attached to middle schools, primary schools attached to mosques, and probably samples should be taken from various economic/ecological regions (agricultural, herding, transhumant).

The final sampling frame should be drawn up based on recommendations from the BRIDGES teams now undertaking educational surveys in Pakistan. It might be possible to hire the interviewers they have trained, or the Mission might want to investigate an add-on to the existing BRIDGES project to undertake this survey.

The survey should be thought of as a project management tool, as well as one which provides information. The questions it addresses should include those needed for monitoring as well as more quantitative ones needed to establish a data base. The survey's data base plus an annual examination of administrative records in the two provinces will generate the data needed for the program level indicators. An achievement test to be developed by the project will provide data for the third indicator. Management of the MIS should be closely coordinated with the World Bank and the design team should investigate ways this could be co-financed.

The data to be collected include the following:

Monitoring Type Questions

- how many children in the class do not have books
- how many children received free books
- has the school been rehabilitated within the past year
- has the school been built within the past year
- is the teacher present in the class
- does the classroom have adequate facilities:
  - blackboard
  - light
  - desks
  - glass in windows
  - toilets
  - running water
  - electricity
  - playground
  - locked storage space
  - cement floors

Data Base-Type Questions

- no. boys in each grade (will generate enrollment data)
- no. girls in each grade (for performance indicators)
- daily attendance rates (disagg. by sex)
- no. boys and girls repeating in each class
- no. boys and girls not completing each grade
- no. boys and girls completing Grade V (will generate completion rates for performance indicators).
- no. teachers in school (disaggregated by sex)
- no. of teachers who are certified (disag. by sex)
- no. of teachers receiving allowances (disag. by sex)
  - transportation
  - cost of living
  - housing
- teachers' salaries linked to qualifications?(by sex)
- teachers' salaries linked to grade taught? (by sex)

(This list is intended to be indicative rather than exhaustive; the Mission and Project Officer will undoubtedly want to add other items).

4. Managing the Project Level Information System

a. Oversight:

At the project level the volume of information to be produced during the ten year LOP is truly impressive. From a management point of view it is also a component which will need serious, full time attention. One person (hereinafter referred to as the information specialist) in HRD should be given full-time responsibility for monitoring the research activities (including the surveys and MIS) to assure that adequate attention is focused on this. The information specialist could be a well-qualified FSN; he or she should have an advanced degree in the social sciences. This person's duties should include:

1. drafting scopes of work for all research components
2. recruiting consultants and/or teams to carry out research or surveys
3. assuring that once surveys have been completed, they are analyzed and that their implications are recognized by the appropriate parties and acted upon
4. plotting out all research activities on a Time-Line implementation plan to assure that they occur well in advance of critical benchmarks when their in-put will be needed
5. drafting a quarterly report to the Project Officer on research undertaken, results or findings of research, how findings were disseminated and to whom, impact of research on project
6. gathering country-wide statistics and comparative statistics from Sind and Punjab to be used in analyzing survey results (on an annual basis).

b. Information:

Below is a list of the types of research that are now planned for the project by year, with an identification of their expected outputs, discussion of their relevance, and which sub-component they will contribute to. The information specialist should establish a schedule of this type for all planned research, bring it up to date on a quarterly basis, and use it as the basis for reports to the Project Officer and the GOP. It should also include information on contracting plans and progress; dates work is to begin and end; dates meetings are planned to discuss findings; persons to be included in these meetings (including appropriate GOP officials); and actions which will be taken as a result of the findings.

In addition, the Project Officer, in conjunction with the Information Specialist, should plan at the time the quarterly research review is drafted, to have a meeting of the project committee (including appropriate Ministry of Education officials

and other involved donors) to consider this review, findings of all the research done during that period, and on that basis to identify the next types of studies or analyses that need to take place. This kind of rolling review will determine the research agenda for the coming years, so that it will continue to build on the results of what has been found. Following each quarterly review, a report of the meeting with recommendations should be sent to the Mission Director and other appropriate Senior Staff.

Because of the rolling nature of this research agenda, the model which follows will only discuss research needs up to year three of the project. It is assumed that any studies after that date are best determined on the basis of the research and surveys yet to come.

1. Studies Ongoing at this time:

- a. Girls' access to primary schools: parents' and community attitudes towards girls' education; types of schools which attract girls.  
RELEVANCE: should contribute to design of teacher training; school construction; curriculum. Will generate data for policy dialogue (parents incentive payments, for instance). May have implications for numbers of female teachers to be trained.  
DUE DATE: Mid January
- b. Classroom practices: how do teachers use text books; methods of teaching  
RELEVANCE: contribute to design of sub-components on instructional materials, curriculum design, teacher training  
DUE DATE: March
- c. Implementation problems found in 12 major policy innovations which have been made in the last 12-15 years: this includes recommendations on paying incentives in rural areas to encourage childrens' attendance at school.  
RELEVANCE: contribute to policy dialogue; implications for PP budget;  
DUE DATE: to be discussed at nation-wide seminar Jan 14-16, 1989
- d. Curriculum-based achievement: will yield data on how well children are learning at grade 5 level  
RELEVANCE: Design of curriculum sub-component; design of textbook sub-component; contribute to design of province-wide achievement tests; teacher training sub-component; baseline data for program-level indicators on achievement rates  
DUE DATE: June, 1989

- e. Physical Facilities Inventory: will generate school-by-school inventory of facilities available  
RELEVANCE: direct contribution to school rehabilitation sub-component; implications for sub-component budget; procurement
  - f. School Administration Management: will discuss present administration practices, teacher absenteeism, supervision techniques, recruitment techniques  
RELEVANCE: implications for policy dialogue (incentives and stipends for teachers, salary equalization with degrees); feeds into design of teacher training component
2. Studies Planned for PP Design (January-April 1989)
- a. Cost effectiveness analysis of textbook reimbursement options, optimal life-cycles of materials, appropriate intervention levels of implementing reimbursement for texts: will recommend mechanism for implementing this, either as yearly grants to GOP gradually phasing out, or as endowment fund to be used by GOP; no. of books to be produced; identify level of MOE to implement reimbursement for texts; ownership of books; estimated probable life of books  
RELEVANCE: contributes to design of instructional materials sub-component; if endowment fund is recommended, will require Congressional waiver; contributes data to be used in policy dialogue with GOP  
DUE DATE: before finalization of PP
  - b. Description of methods used elsewhere for linking resource allocation to schools through enrollment and average daily attendance levels; receptivity of ministry officials and primary school teachers to idea:  
RELEVANCE: recommendation and data to be used in policy dialogue; contributes to administration and management sub-component  
DUE DATE: before finalization of PP
  - c. Investigation of type and amount of incentives necessary to motivate female teachers to accept assignments in rural areas: will identify incentives now being received and by whom; opinions of urban and rural teachers on effects of proposed stipends; examples from other parts of the world  
RELEVANCE: data for policy dialogue which will also generate a project Condition Precedent; will also contribute to teacher training sub-component  
DUE DATE: before finalization of PP

- d. Description of middle school level of education for men and for women; present qualifications of male and female primary school teachers: numbers of middle schools now operating in Baluchistan and NWFP, description of present curriculum and recommendations for improvements; description of training, methods of recruitment, numbers of students; teacher-student ratio; qualifications of teachers; salaries; projections on needs for new schools;  
RELEVANCE: will contribute to design of teacher training  
DUE DATE: before finalization of PP
- e. Survey of construction and rehabilitation needs and costs: list of schools to be upgraded, identification of major work to be done, estimated costs, identification of sites for new schools, no. of classrooms needed, designs, cost estimates, identification of local construction firms available to do the work, recommendation of contracting mechanisms; implementation plan indicating calls for bids, competitive procedures to be followed; identification of monitoring mechanism and office at USAID which will be responsible  
RELEVANCE: contributes to design of construction component  
DUE DATE: before finalization of PP
- f. A review of the literature dealing with the impact of subsidies for school attendance, especially for girls, interviews with parents in rural areas (using rapid rural appraisal methods) to determine opportunity costs of sending girls to school, what parents perceive as advantages of benefits of schooling for girls (as well as disadvantages); interest in idea of subsidies  
RELEVANCE: data for policy dialogue with GOP on advantages of offering subsidies to families/schools; contributes to design of PP  
DUE DATE: before finalization of PP

### 3. Studies Planned During First Year of Implementation

- a. Baseline Data Survey (as described above)  
RELEVANCE: will yield baseline data to measure project success; begin monitoring of sub-components.  
NOTE: these data will need analysis after survey is completed and will feed into other small case-studies. For instance, early on the project might want to look at the areas with highest and lowest enrollment of girls to determine what factors contribute to this; teacher salaries, teacher presence would merit the same kind of investigation, (i.e., is there a correlation between high teacher

- absenteeism and low teacher salaries).  
DUE DATE: within 6 months after PROAG is signed
- b. Economic analysis on relevance of output of educational system to labor market needs as evidenced by rates of return, manpower planning, tracer studies of school leavers  
RELEVANCE: should feed into curriculum design, new textbooks, teacher training  
DUE DATE: within first year after PROAG is signed
- c. BCDs (Bureau of Curriculum Development) and textbook boards (TBs): computer equipment needs and staff training needs identified; analysis of TB procedures completed  
RELEVANCE: computer procurement begins; training plan drafted; policy decisions made and procedures for implementing free textbook program agreed upon  
DUE DATE: within first 6 months after ProAg signed
- d. Study of ways in which radio has been used elsewhere for both teacher training and direct instruction to primary and middle school classrooms  
RELEVANCE: contribute to experimental program design with AIOU for which agreement should be reached in first year  
DUE DATE: within first 3 months after PROag signed
- e. Design of two experimental studies - one on teacher training and one on cost incentives
- f. School mapping for Baluchistan.  
RELEVANCE: determination of where new schools should be built; basis for policy dialogue  
DUE DATE: within first six months after signing of ProAg
- f. Achievement test to be given to sample of fifth graders in two project areas  
RELEVANCE: yields data for performance indicators  
DUE DATE: end of school year

#### 4. Studies Planned During Second Year of Implementation

- a. Survey: this year analysis should include any noticeable changes in data from preceding year, especially in enrollment (disaggregated by sex), dropouts, repeats, teacher attendance. Small case studies should be undertaken to ascertain why differences exist from first year and to identify relevant factors. If textbooks will have been distributed this year, this factor should be checked for influence on enrollment, participation.

- b. Teacher training study begins
- c. Cost incentive study begins
- d. New studies identified based on survey results, other research findings

5. Research for Year Three

- a. Survey: analysis of results should focus on effects of in-service teacher training, "Awards Program" transportation allowance, student incentives plan - have they increased enrollment, lowered dropouts. How has rehabilitation affected these rates.
- b. other studies ( to be determined by Project Review Committee meetings on Research Agenda).
- c. Achievement test given to sample of fifth graders in two project areas  
RELEVANCE: data for performance indicators  
DUE DATE: end of school year

Attachments:

- 1 - Scope of Work
- 2 - Possible Approaches to Program Level Monitoring in Selected Areas of the Mission's Portfolio

Attachment 2

Possible Approaches to Program Level Monitoring  
in Selected Areas of the Mission's Portfolio

This attachment presents preliminary ideas about the collection, analysis and use of program level for each of the ten program areas cited in the Mission Action Plan and for the four additional areas noted in the report. In only certain cases have these ideas been discussed with the relevant technical experts within the Mission, and there may even be cases where something different or better than the ideas suggested here is already in practice within the certain offices within the Mission. These ideas are therefore presented here more to initiate discussion than to suggest definite conclusions.

1. Balance of Payments: The Program Office currently tracks and reports the country's overall balance of payments performance using GOP, World Bank and IMF data. It is impractical and unnecessary, in our view, to make any significant changes in these monitoring and reporting procedures or to introduce new procedures for monitoring USAID program performance in this area. We also see no obvious way of expanding the utilization of this data in USAID's programming or policy dialogue activities.

2. Domestic Resource Mobilization: This problem area forms one of the two major pillars of USAID's stated strategy in Pakistan. The Program Office currently tracks and reports country trends in this area through its annual review of the GOP budget. This information is ostensibly used effectively in semi-annual policy discussions with the GOP. We see no need or obvious value in improving this monitoring of country trends, but would suggest that active consideration be given to instituting an improved system for monitoring USAID program performance with regard to this problem area.

Monitoring of the individual and aggregate effects of USAID projects and programs on domestic resource availability could be undertaken with varying degrees of rigor and complexity. We would propose that any such monitoring begin at the "low end" of rigor and complexity and result in the preparation of project level DRM "balance sheets" on an annual basis. These balance sheets, which would be compiled by the Program Office based on discussions with individual project officers, would itemize the estimated contribution to government coffers from USAID-encouraged taxes, subsidy removals, user fees, movements of parastatals off budget, and quantified efficiency gains. These estimates would, in some cases, be only educated guesses and would exclude projects' more indirect consequences and "intangible effects". A basis for these estimates would be

available in many cases from Project Papers and special studies commissioned by the Mission. No claim would be made that USAID was unilaterally responsible for these improvements, only that it was strongly associated with them.

To be fair, the DRM balance sheet should include new liabilities as well as new assets. These new liabilities would be any added recurrent cost consequences associated with USAID-supported projects and programs. Again, we would suggest this be limited only to the most direct, significant and quantifiable effects.

In addition to its value for monitoring a major area of emphasis in USAID's strategy, the active use of a balance sheet of this sort might have the benefit of further sensitizing project design and project management personnel to this important area of concern.

3. Agricultural Productivity: The Mission has a very large and relatively complex agricultural portfolio composed of a number of traditional agricultural projects, a large irrigation effort, a CIP/policy thrust and several rural development projects. Upwards of 15 separate contracts are involved. Of these various activities only one, irrigation, can be expected to have reasonably direct and attributable effects on agricultural productivity and production in the short run. Other efforts respond to a variety of identified constraints to Pakistan's agricultural growth and are perhaps best viewed as contributions to a national agricultural strategy.

Indicators for agriculture cited in the Action Plan are primarily based on country trends, with data derived principally from national figures. No effort is made to aggregate the contribution of USAID's program. Given the nature of the current portfolio, this decision would appear to be a prudent one. To the extent the Mission wishes to upgrade impact monitoring systems regarding its agricultural program, it would seem most appropriate to focus initial efforts at the project level where, at present, certain projects appear to have been much more effective than others in identifying and reporting their proximate effects and the relationship of these effects to agricultural growth and productivity. Such data could hopefully be of use not only in the management of individual projects but could contribute an empirical basis for any future decisions about program focus and consideration.

4. Energy: As discussed in sector II of the report, program level monitoring of energy could focus on assessing progress in key strategy areas - policy dialogue, private sector participation, institutional development and resource development - or on four specific objectives stated in the Energy Strategy paper - (a) electricity and gas tariff reform; (b) increased domestic energy development; (c) more electricity in rural areas; and (d) improved energy production, conversion, distribution and end-use efficiency.

Using either the key strategy areas of the specific objectives would begin to assess the overall progress of the energy program toward assisting Pakistan to meet its energy requirements for economic growth. The specific strategy areas have the advantage of relating more directly to the mission's overall programmatic objectives. The four specific objectives have the advantage of linking somewhat more directly to existing constraints in the energy sector. Both could be addressed using information from the the types of activities described in Section II.

5. Population: The indicators cited in the Action Plan are those conventionally used worldwide for assessing progress in family planning. Unlike indicators in certain sectors, these indicators tend to be quantitative and measurable. Moreover, relatively large investments have been made in developing and refining consistent and replicable means of collecting and analyzing information on the key indicators involved.

For USAID, the critical issues for impact assessment in this area would appear to be two -- (1) differentiating country trends from program performance indicators, and (2) exploiting the available opportunities to strengthen host country data collection and data-based decision-making with respect to population growth and family planning. Three of the indicators cited -- accessibility, contraceptive prevalence and private sector involvement would seem to be suitable as program performance indicators for which it would be feasible to set and monitor annual targets in conjunction with the relevant GOP agencies. Disaggregation of the data (especially by geographical area) should contribute to ongoing managerial decision-making about what is working and why. The other two indicators noted in the Action Plan -- fertility rates and population growth rates -- are best seen as country trends assessed periodically (possibly every five years) and used, among other things, to assess the key purpose-to-goal level hypotheses in USAID's population program.

USAID is the principal donor involved in promoting private sector approaches to family planning. Although other donors are involved in public sector family planning, USAID continues to be a dominant donor. It would appear to be both impractical and counterproductive to measure the discrete impact of USAID's efforts above the output level.

6. Child Survival: The current situation and issues regarding program information systems for USAID's Child Survival objective are virtually identical to those discussed above with respect to the Mission's efforts to address population growth. Particularly promising program performance indicators include EPI coverage, ORT awareness and use, and cases of diarrhoea, pneumonia and malaria. One output level indicator, number of health providers trained, might also be regularly reported. Other common child survival indicators focusing on infant and child nutrition are

apparently impractical to track at this time. Generating and interpreting data on the key country trend indicator, infant mortality, will and should be the subject of major USAID investment beginning with the establishment of a system of vital event registration.

UNICEF and WHO join AID as major donors in the field of child survival. The three donors have ostensibly taken major steps towards developing and employing a "team approach" to addressing the problems at hand. This collaboration includes common efforts in generating information, largely through the use of "international reviews" undertaken on approximately an annual basis. These reviews have been, and should probably continue to be, effective ways of generating and analyzing information on child survival. One addition that might contribute to this process and to USAID's own planning and monitoring would be the establishment and monitoring of annual targets for each of the selected program performance indicators. The new omnibus Child Survival project would appear to present a particularly good opportunity to clarify any unresolved issues regarding program objectives and information systems.

7. Primary Education: The ambitious primary education project aims to enhance the overall performance of the primary education system in NWFP and Baluchistan. Its objectives -- expanded enrollments, greater relative participation by girls, improved educational quality and efficiency are not unique to the project but represent overall goals for the educational system. Moreover, measurement at subordinate levels (e.g. schools constructed, teachers trained, books printed, etc.) are essentially irrelevant if they do not translate directly into improvements in the quantity, quality and equity of education provided. In this area, it is therefore recommended that measures of program performance be identical to the measures used for country trends and that these measures focus on improvements in the NWFP and Baluchistan in comparison to a baseline and in comparison to the rest of the country. This approach would entail revision of the performance indicators cited in the Action Plan to stress enrolments and completion rates.

Since this data is the kind of information ideally available to local provincial and national education authorities for their own purpose, the development of such an information system represents a major opportunity for institutional strengthening. The resulting data should also have a secondary value as a basis for ongoing policy dialogue with the GOP with regard to primary education.

8. Improvement of Key Institutions: Much of the Mission's portfolio and effort are devoted to strengthening Pakistani institutions. The Action Plan includes under this heading not only work with WAPDA, TIPAN, the Ministry of Agriculture and the

like, but also the proposed HRD Centers of Excellence project and the various Mission efforts in management and technical training. Strategically, these activities are presented both as part of the Mission's sectoral strategies in energy, agriculture, education, etc., and as part of an overall Mission initiative in the area of institutional strengthening.

As currently stated, the indicators in the Action Plan are expressed principally as enumerations of the number of individuals to be trained and institutions to be assisted. While it is probably inappropriate to set or monitor aggregate quantitative objectives with regard to most aspects of institutional strengthening, it would be feasible to establish a consistent approach to assessing the Mission's performance in institutional strengthening in various sectors of its portfolio. One such model, would examine institutional improvements in terms of four separate dimensions: (1) the quantity and quality of an organization's product(s); (2) if relevant, the level of demand for those products; (3) the extent to which the organization is served by adequately trained local personnel and/or local consultants who have incentives to remain with it; and (4) the adequacy and sustainability of the organization's resource base. The monitoring plan presented below for the energy sector is an example of the application of this framework in a specific case. The use of this or a similar framework for reviewing and preparing a scorecard on the Mission's institutional development activities would facilitate attention to these objectives and encourage transfer of learning across the Mission's portfolio.

The incorporation of the Mission's participant training activities as part of this program area underscores the value of assessing the effects of these programs on institutions, and not only on the trainees themselves. Possible indicators would include career progression of the individuals trained, the adequacy of trained personnel in key institutions, and the effective transfer of needs assessment and training capabilities to host country organizations. Comparison of effectiveness in terms of such criteria would require a more extensive follow-up system on trainees and additional attention to the overall role USAID-sponsored trainees are playing in their respective institutions. Such analysis by HRD and its contractors could not only have direct consequence for USAID's various training activities but would facilitate comparisons between long-term and short-term training, in-country and overseas training, technical and managerial training, and so on.

There is some thought in the Mission that the proposed HRD Centers of Excellence Project is better conceived as contributing to an objective of promoting science and technology, rather than as an educational intervention. Should it be decided to approach the project from this vantage point, it might imply the articulation of a new Mission objective regarding science and technology or, alternatively, some recasting of the Mission's stated institutional development objectives and indicators.

9. Lagging Areas: By one construction, attention to the problem of lagging areas is one of two basic pillars of the Mission's strategy and is the theme that unifies Mission efforts in such areas as rural development, road construction, rural electrification, primary education and narcotics. The indicators associated with these efforts could be defined in political terms but, equally plausibly, could be defined in terms of equality of access to social services, and physical infrastructure (essentially, project outputs). Defined in this latter sense, there is no need to aggregate data across sectors, but may nevertheless be considerable value in keeping a watching brief and integrated scorecard for the Mission's efforts. To do so would facilitate the identification of underserved areas, lacking services and the like; help to exploit the linkages and lessons learned between sectors; serve as a useful policy dialogue tool with the GOP; and provide an improved basis for reporting to Washington. Were it deemed worthwhile to do this, it would be important to substantially refine the indicators cited in the Action Plan for "Lagging Areas", to establish quantitative targets for country trends (overall infrastructure and social service improvements) and program performance (USAID's contribution to these improvements), and to designate a "point person" or Office for assembling and interpreting this data. Obvious analyses would include before/after comparisons and assessment of the size of the gap between lagging areas and the rest of the country. Little or no new data collection would be required.

10. Narcotics: To monitor progress in this area the Mission should rely on data from the three area development programs (Baluchistan, NWFP and Tribal Areas), supplemented by any data developed by the Embassy or other sources. The basic program performance indicator should probably continue to be that originally identified by the Mission: eliminating of 50% of 1987 poppy production levels in settled areas and to the extent possible in tribal areas by 1993.

Rural Development Office could provide baseline figures on how many acres were planted in poppies in 1987 in settled areas and give its best estimate for the tribal areas. Benchmarks should then be set for what can be accomplished for each year leading to total eradication by 1993.

The technical assistance teams for each of the three projects should then be asked to report in one of their quarterly reports each year (whichever is most appropriate) on acres of poppies eliminated.

11. Project Implementation and Expenditure: The system currently in place for generating, synthesizing and acting on program level information on implementation and expenditure appear to be suitable for the purpose.

12. Policy Reform: One approach to improving the mission's tracking of policy reform would be to re-institute in modified form the annual report on policy dialogue progress. Though a useful update on the current status of policy reforms the mission supported, the previous report tended toward a somewhat inflated statement of the mission's accomplishments by failing to note the contribution of other donors to the same activity and to give too much detail on the actions taken or pending.

As described in Section II.A.2 - Policy Dialogue Monitoring, one approach would be to develop an inventory of key policy issues in each sector that the mission gives highest priority and directs most resources toward influencing. Each office in the mission would be responsible for developing and maintaining such inventories. The policy issue, the major development constraint(s) it constitutes, the key GOP ministries that need to take action and a set of benchmark with a realistic (i.e., conservative) estimate of the time required to enact reforms (if possible), and current status could constitute a standard format for the offices to follow. In addition to a simple listing of this information, the office would prepare a "policy briefing memorandum" twice a year for senior mission mission and other mission offices. The memorandum should briefly discuss (1-3 pages) progress, important actions pending and problem areas. The program could compile and summarize these reports for an overall mission "status report" on its policy dialogue efforts.

13. Natural Resource Management: This area is receiving increasing attention both in the Agency and in Congress. At this point, there is no model or guidance to follow on how to monitor and report on the mission's support for natural resource management across its portfolio; however, some thought on developing a simple monitoring system now would be helpful in responding to future requests for information on how the mission is addressing this issue. Two offices in the mission are principally involved with natural resource management issues - Agriculture, Energy and Environment. Monitoring their support for natural resources management could focus largely on periodic (e.g., annual) descriptions of the ways in which their projects are minimizing potential environmental problems (e.g., soil erosion abatement measures, pollution control) and direct interventions to improve the resource base (e.g., agro-forestry components in agriculture projects, forestry projects).

14. Participation by Women: Increasing participation by women in the development process is an important goal of several USAID projects and has substantial political salience both in Pakistan and in the United States. While it would be feasible to identify and track selected country trends using available data ( e.g., female enrolment ratios, percentage of women in the university, percentage of women in parliament, etc.), if USAID wished to do

so. More important, however, would be the setting of program performance targets and the monitoring of USAID effectiveness against those targets. Examples might include the percentage of women in various programs and the most obvious cases where project activities are directed towards the needs of women. While such data would presumably be of value for reporting purposes and for policy discussions with the GOP, it should be equally relevant in sensitizing project officers to the importance of this objective.

As with indicators concerned with lagging areas, the results being enumerated with respect to this objective are basically project outputs. There is no obvious need for new primary data collection in this area nor for aggregation across sectors, except with respect to indicators such as training of women professionals. There might well be a need, however, for gender disaggregation of some of the data currently collected.