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THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
COLOMBO, SRI LANKA

PURPOSE-LEVEL INDICATORS
IN USAID/SRI LANKA'S
PROJECT IMPLEMENTATION REPORT
(PIR)
AN EVALUATION

(CONTRACT # 499-0000-0-00-1050-00)

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EXECUTIVE SUMMARY

The prime focus of this report is on the Purpose-Level Indicators in USAID/Sri Lanka's Project Implementation Report (PIR). In addition, however, this report contains an overview of the AID/Washington reporting structure to which USAID/Sri Lanka must also be responsive, and outlines a systematic approach for synthesizing USAID's Project Portfolio with its Strategic Program Objectives.

Recent related modifications (detailed in separate reports) as a result of my consultancy are also discussed where pertinent to this conceptual framework. In essence, several major modifications to the existing system have been designed and pilot tested, and are now ready for installation and operational implementation, if management chooses to do so.

If further assistance is required in program and/or project information systems design, implementation or evaluation, I would welcome the opportunity to return to Sri Lanka.

PREFACE

The purpose of the Scope of Work (SOW) under this contract was to assist USAID/Sri Lanka develop a systematic approach for analyzing and monitoring the Mission's overall Program Performance as well as its project portfolio.

This document addresses one component of the SOW -- Deliverable # 2 -- an evaluation report on the Mission's current set of project purpose-level indicators (per the recent PIR report) that includes recommendations on modifications or adjustments needed to more effectively measure performance at both the program and project level.

Kenneth F. Smith
Colombo, Sri Lanka
12 August 1991

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**ON DESIGNING SYSTEMS
FOR MONITORING
PROGRAMS & PROJECTS**

Whenever anything is measured numerically, wherever there is an attempt, however rough, to assess anything in the form of numbers, even by the simple process of counting, then there begins to arise the necessity for making judgements as to the significance of the data and the necessity for traffic rules by which the flow of information may proceed smoothly and purposefully.

M.J. Moroney
Facts from Figures

INTRODUCTION

The four primary purposes of program and project performance monitoring in AID are quite clear:

1. Accountability for expenditures of public resources
2. Assessment of Progress towards attaining predefined Mission objectives
3. Substantiation of Success in Mission endeavors
4. Alerting Mission Management to Issues and Potential Problems requiring Attention -- for possible remedial action.

Over the past year however, the proliferation of mechanisms for conducting progress assessment -- emanating from several sources and articulated by a bewildering variety of acronyms -- has increasingly given the process an esoteric aura.

Therefore, in addition to simply assessing the Purpose-Level Indicators in USAID/Sri Lanka's Project Implementation Report (PIR)¹ -- as called for in the Scope of Work -- this report also contains a "reader's guide" to one portion of the progress reporting structure in which USAID/Sri Lanka is a prime participant. Recent modifications to this structure stemming from my consultancy -- both those already adopted, as well as prototypes still under review (all of which are detailed in separate reports) -- are also summarized, together with recommendations for further development and future application.

The Project Implementation Report (PIR) is a relatively new system in USAID/Sri Lanka. The PIR is attempting to encapsulate a great deal of information -- both quantitative and qualitative -- on several aspects of importance to Mission Management. The information comes from a wide range of projects and approaches to development, and is presented in a succinct, standardized format.

At this stage, the PIR is still undergoing "sea trials". Despite careful planning and design, with many actors involved in different settings, inevitably a few "bugs" can be anticipated during implementation. True to form, a few "glitches" are in fact currently being

¹as of March 1991

encountered. Nevertheless -- as far as it goes -- the PIR System is basically a sound model. The five major thrusts I recommend to improve the PIR are:

1. Sharpen the focus of particular project contributions and trim the narrative aspects to reporting Progress vs Plan² in "Management by Objectives" terms
2. Quantify and monitor the project implementation process -- in addition to substantive, quantitative, accomplishments
3. Link physical project progress to financial performance
4. Present project progress in graphic form -- in addition to the current statistical tables
5. Take the next step and integrate the project-by-project reports into a comprehensive analytical overview and quantitative summary of the Mission's program status

Ultimately, through this program summary, one should be able to relate the performance and status of various Mission projects and activities to the indicators selected for monitoring accomplishment of the objectives articulated in the Mission's Strategic Framework.

The improvements suggested in this report are all "do-able" and with some additional effort and persistent follow-through, can be implemented for a more effective system. Item 1 requires some interactive hands-on action-training reports preparation sessions with the Projects Office and those who actually prepare the reports. Prototypes for items 2, 3 & 4 above have already been developed and pilot tested, and are now ready for installation and operational implementation. Replication is the next step, if Mission management chooses to do so. Item 5 will take a little longer, but a conceptual framework is also outlined in this report. The Monitoring, Evaluation & Feedback (ME&F) System which I developed earlier this year for the GSL under the ISM Project is an example of an operational model. Unfortunately, limitations of time and priorities for Program-level indicator development did not permit further exploration and development of this capstone aspect during this consultancy.

²This may require further structuring of the report and -- although it entails additional work -- editing (by the Projects Office) of submissions received from the sector project officers.

**PROGRAM & PROJECT
PERFORMANCE INDICATORS

MONITORING & REPORTING

STRUCTURE**

In developing systems and indicators to monitor and report performance and progress on its various program and project objectives, USAID/Sri Lanka does not have a completely free hand in either systems or indicator design. A hierarchy of systems are already in existence -- imposed from AID/Washington (and others are currently being formulated) -- with which the Mission must interact. Nevertheless, while the structures of these systems are in place, the Mission is relatively free to develop -- or modify -- some of the indicators. And of course, the Mission is ultimately responsible for developing and installing procedures to obtain the substantive data -- and thereafter to sustain the flow of information in a systematic manner.

Essentially -- excluding the primarily financial and budgetary mechanisms such as the MACS and ABS reports -- two loosely interrelated reporting systems exist (or are in the process of development) to meet program and project progress reporting needs. Each of these systems has sub-sets or components -- some of which appear to overlap. All of these systems and components are cryptically referred to by their acronyms:

1. PROGRAM LEVEL

- a. PBB -- Tripartite Performance Based Budgeting System
- b. PPR -- Program Performance Report

2. PROJECT LEVEL

- a. PIR -- Project Implementation Report
- b. PLM -- Project Purpose-Level Monitoring System

PROGRAM LEVEL

A. THE PBB

The tripartite Performance Based Budgeting System consists of three major topic areas, each of which is further divided into sub-topics. In some categories, particular indicators are specified, in others the Mission is free to devise its own indicators, while in still other categories no indicators are considered appropriate, and a summary narrative statement is called for. The PBB structure is as follows:

A. Program Performance

1. PPI - Program Performance Indicators

A narrative statement (two sentences are suggested by AID/Washington) summarizing information provided in the PPR.

2. MM - Management Measures

There are three management measures in USAID/Sri Lanka's MM section. The first two were prescribed by AID/Washington. The third was offered by the Mission.

- a. OYB/Pipeline Ratio
- b. OYB/Mortgage Ratio
- c. Absolute Pipeline

3. FOCUS

Two indicators are prescribed in terms of ten categories of potential USAID interest:

- a. Percentage allocation of Program Funds,
and
- b. Percentage allocation of Direct Hire
Staff
for
 - A. Agriculture/Rural Development
 - B. Natural Resources/Environment/Energy
 - C. Health/Child Survival/Population
 - D. Education/HRD
 - E. Private Sector
 - F. Housing/Urban Development
 - G. Democracy Initiatives
 - H. Infrastructure
 - I. Other - Disaster Relief
 - J. Centrally Funded

B. Country Assessment**1. POLICY**

Five indicators are prescribed

- a. Budget Deficit
- b. Parallel Market Currency Premium as a percentage of the official rate
- c. Real Interest rate
- d. Trade Weighted Tariff rate
- e. Private Investment as a percentage of total investment

2. NEED

Two indicators are prescribed

- a. Per Capita GDP
- b. Percentage of Population Below the Poverty Line

3. US Interests/Transnational Issues

Five aspects are specified for reporting upon -- all in narrative form. Only one statistical indicator is called for.

1. POLITICAL CONTEXT**2. ECONOMIC RELATIONSHIPS****3. HUMAN RIGHTS**

- a. Freedom House Index
in addition to the narrative statement

4. ENVIRONMENT**5. OTHER FACTORS**

B. THE PPR

The Program Performance Report -- while required by AID/Washington and the overall format specified -- is essentially the Mission's creature in terms of defining and structuring the contents. Known as PPIs -- Program Performance Indicators -- the PPR is a report of the Mission's major Program Objectives under its Strategic Framework, further subdivided into two key indicators to monitor progress towards each of those objectives. [This is the report which is summarized in "category a." of the PBB.]

Program Objective 1**SOUND INVESTMENT CLIMATE & BUSINESS PERFORMANCE****Indicators**

1. Number of Shareholders of Publicly Quoted Companies
2. Value of Shares of Publicly Owned Companies Transferred to Private Investors

Program Objective 2**DIVERSIFIED & COMMERCIALIZED AGRICULTURAL SYSTEM****Indicators**

1. Value of Exports of Non-Paddy & Non-Plantation Crops
2. Area of Mahaweli System B Producing Non-Traditional Agricultural Commodities

Program Objective 3**CONSERVATION AND SHARED CONTROL OF ENVIRONMENT & NATURAL RESOURCES****Indicators**

1. Hectares of Secondary Irrigation Systems Formally Turned Over to Organized & Trained Water User Groups
2. Land Titles Issued to Farmers/Settlers Having Land Under Their Control

USAID/Sri Lanka's Mission Managers decided that standing alone, the foregoing indicators were insufficient to effectively monitor program performance as reflected in the PPR. Therefore, to enhance their ability in this area, and supplement the PPIs, they expressed the desire for a series of Secondary Level PPIs.

To meet this felt need, I have developed a prototype system for recording and analyzing supplementary supporting data for the PPR's Program Objective 2, Indicator 1 above:

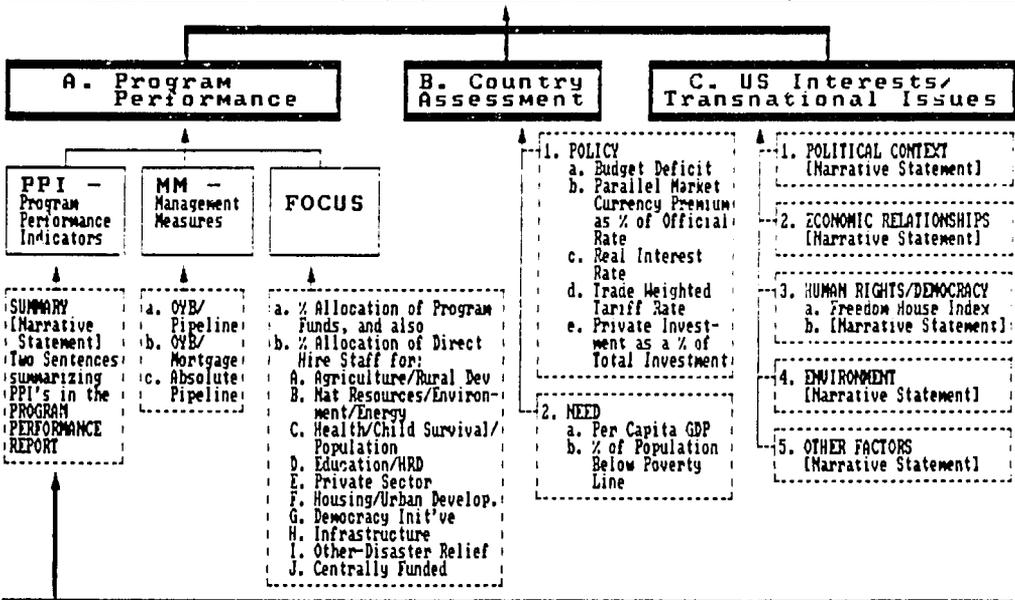
1. Value of Exports of Non-Paddy & Non-Plantation Crops

A Program-Level Monitoring and Reporting Structure chart is shown on the following page for ready reference to summarize the foregoing outline.

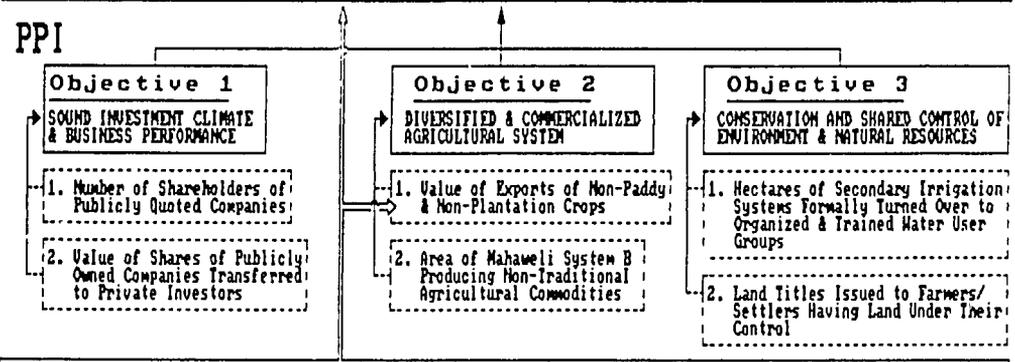
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PROGRAM & PROJECT PERFORMANCE INDICATORS
MONITORING & REPORTING STRUCTURE

PBB **TRIPARTITE PERFORMANCE BASED BUDGETING SYSTEM**
Based on AID/W (Asia Bureau) Requirements



PPR **PROGRAM PERFORMANCE REPORT**
AID/W (Asia Bureau) Requirement
[Based on USAID/Sri Lanka's 1991 Strategic Framework]



PP12 **SECONDARY LEVEL PROGRAM PERFORMANCE INDICATORS**
[For Internal Mission Sector Monitoring to Support Aggregate PPI Indicators Reported to AID/W in PPR Above]

NOTE: Only one Secondary Level PPI set has been developed ▲ Indicator 2.1 "Value of Exports of Non-Plantation Crops"

PIR **PROJECT IMPLEMENTATION REPORT**
Project-by-Project Level Reports of ADMINISTRATIVE, FINANCIAL & PERFORMANCE STATUS INFORMATION with respect to PROJECT OUTPUTS & PURPOSE

- NOTES:
1. PIR Indicators reviewed for Systematic Purpose Level Monitoring (PLM).
 2. PLM Prototype System developed & demonstrated for Monitoring PROCESS of Policy Reform-type Projects.
 3. PLM Prototype System also developed & demonstrated for Monitoring QUANTITATIVE ATTAINMENTS of other Projects.
 4. Ultimately, PLM should be integrated with PIR; and PIR should feed into PP12.
 5. Currently (except for the prototype applications) the linkage between PLM, PIR, PP12 & PPI is only conceptual.

PROJECT LEVEL

A. THE PIR

The Project Implementation Report is the Mission's system for monitoring project performance. The PIR is a compendium of administrative, financial, and performance status information with respect to "Purpose" and "Output" levels -- project-by-project.

Financial information is presented in both tabular and graphic form. The performance status information is in both statistical tables, and narrative form, segregated by Purpose and Outputs.

NOTE: The PIR is not currently linked to either the PPI, PPR or PBB structures; however this is the ultimate objective.

B. THE PLM

One of the major thrusts of my consultancy has been to develop a prototype system for more effective Purpose-Level Project monitoring (PLM) -- particularly in regard to Policy-type Institution-Building projects where little or no intermediate substantive quantitative products result, or leading indicators are evident.

In the absence of substantive quantitative indicators, a systematic approach was developed for monitoring the Process by which these types of projects plan to attain their objectives, and four separate case studies were developed and applied to test and refine the system. [The system application is generic, but the design has to be tailored to each project -- based on modifying its Log-Frame, its implementing schedule and budget.] The system is interactively Lotus based, relatively simple to update for reporting purposes, and produces time-series statistical status graphs, as well as an analysis of work performance vs planned budget expenditures.

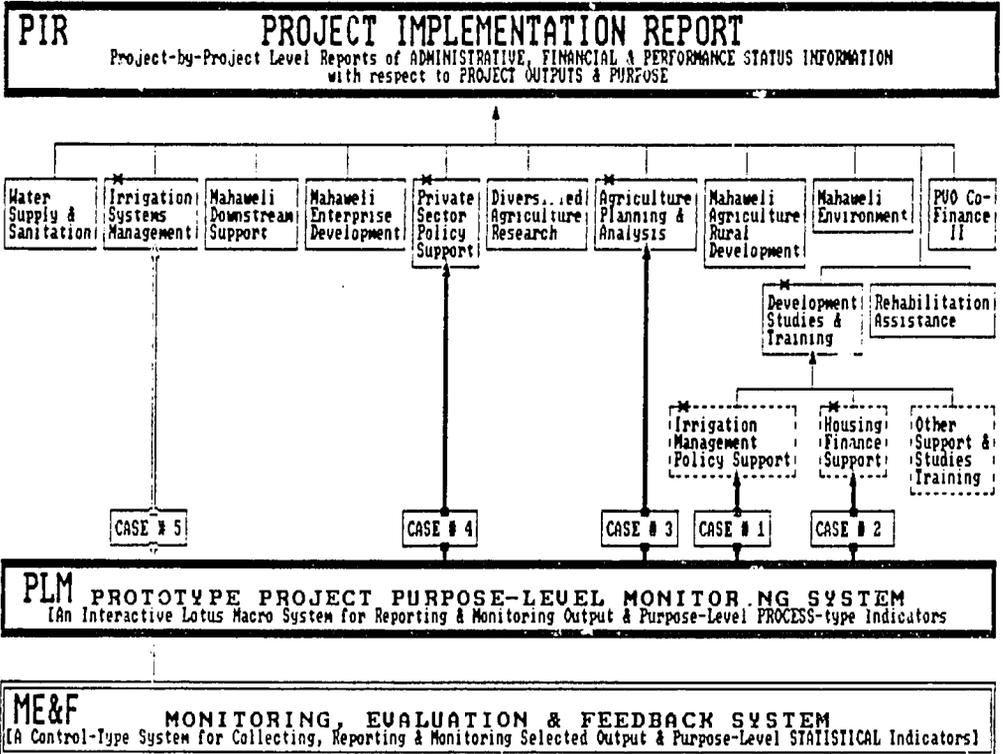
In order to address the need for monitoring Project Purpose-Level indicators which are substance -- rather than process -- another prototype system was developed for monitoring statistical data and one application tested -- for the ISM Project. This system is also interactively Lotus based, relatively simple to update for reporting purposes, and produces time-series statistical status graphs and trends. [The data for this project application for the PIR was generated by a separate Monitoring, Evaluation & Feedback (ME&F) System developed earlier for operational use on the ISM Project.

Thus, prototype systems now exist to monitor both Process performance and substantive accomplishments of Projects to improve the effectiveness of the PIR.

Relatively little time remained for examining the purpose-level indicators of the Mission's other projects in any detail, or follow-up discussions with the USAID, GSL and Contractor Project Managers. The comments which follow are thus based on cursory documentary desk research -- and thus the potential for misinterpretation and subsequent misunderstanding is great. With this caveat, my comments and recommendations with respect to the purpose-level indicators in the 2nd Quarter FY 1991 PIR (i.e. as of 31 March 1991) are offered on the pages following the Project Level Reporting Structure chart.

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
COLOMBO, SRI LANKA

PROGRAM & PROJECT PERFORMANCE INDICATORS
MONITORING & REPORTING STRUCTURE



STATUS OF SYSTEMS DEVELOPMENT

- * ⇒ The ISM Project was reviewed at both the Colombo HQ & Field Operating Levels. A Monitoring Evaluation & Feedback (ME&F) System was designed and implemented, and is now operational. The ME&F System is now providing STATISTICAL performance data on Outputs and Purpose-Level Indicators for both GSL and USAID Managers. The ME&F is an interactive LOTUS macro System. Key Statistical Data from the ME&F is also used by USAID for PIR PURPOSE-LEVEL MONITORING.
- * ⇒ The PS2, APAP, & IMPSA Component of DS&T Projects were reviewed at both GSL HQ and USAID Levels. A standardized format interactive LOTUS Macro System was developed for monitoring the PROCESS, and BUDGETARY PERFORMANCE of Policy Reform-type Projects.

A similar system was developed for the DS&T Housing Component; however the application was premature, as the details of the project still have to be formulated.

- NOTES: 1. Although operational, the PLM System applications are still only Prototypes.
2. A formal Management decision is required to implement the system, and integrate PLM with the established PIR System.
3. If the decision is made to adopt this system for Project Purpose-Level Monitoring, some staff are trained to implement these applications. However, a similar investment in design effort and Lotus Macro Programming will be required for the Mission's remaining projects which USAID staff may not be prepared to do without further help.

**PURPOSE-LEVEL INDICATORS
FROM USAID/SRI LANKA
PROJECT IMPLEMENTATION REPORT
(PIR)**

Water Supply & Sanitation Project

1. Operation and Maintenance Cost Recovery
2. Billing time

Irrigation Systems Management

1. To be developed based on new quarterly ME&F reports
2. Research Study by IIMI

Mahaweli Downstream Support

1. Farm families settled with full irrigation facilities in Zone 4A
2. Non-farm families settled in Zone 4A villages and hamlets

Mahaweli Enterprise Development

1. Net increase of 1,250 jobs in Mahaweli SSEs by 1995
2. Net increase of 9,200 jobs in Mahaweli MLEs by 1995
3. Private Sector free to operate in project area without unfair competition from public sector entities
4. Land tenure arrangements established for private enterprise that are secure and permit land to transfer between private parties.
5. Value of private MLEs fixed assets in the Mahaweli

Private Sector Policy Support

1. Instances of private-public dialogue resulting in improved loans, regulations, or procedures which directly impact production
2. Actual movement of publicly owned enterprises into private control/ownership
3. Ownership of publicly traded equity by an increasing number of private Sri Lankan individuals

Diversified Agriculture Research

1. Average Yield per hectare of major SFCs (Corn, Cowpea, Greengram, Backgram, Sesame, Groundnut, Chillie, Big and Small Onions)
2. Gross annual extent of major SFCs (above)

Agriculture Planning & Research

1. Policy Decisions being made based upon technical analyses prepared by ministry planning units
2. Planning Units producing studies leading to revised National Agriculture Strategy
3. GSL Budgeting sufficient funds to sustain planning units activities
4. Preparations underway for revision of strategy

Mahaweli Agriculture & Rural Development

1. Average net farmer family income from irrigated land in System B increased by 50% over income from two paddy crops
- 2/3. Improved production technology to encourage farmers to diversify 50% of Yala cultivation and 15% of the Maha cultivation to increase income by 50% over paddy
- 4/5. Establishment of strong farmer organizations for operation and maintenance of the secondary and tertiary canal system of System B and for undertaking other economic activities. Unit Level Farmer Organizations (ULFOs) to be legally registered and undertaking economic activities; Turn-Out Groups (TOGs) to have membership agreements and be cleaning canals regularly

PVO Co-Financing II

1. Participatory decision-making activities within sub-projects
2. Project expenditures on DPI activities
3. Extent of Women Beneficiaries

Development Studies & Training

1. Improvement of Data Base for policy appraisal.
2. Studies on various topics
3. Number of participants completing training

Mahaweli Environment

1. DWLC managing Mahaweli wildlife resources in protected areas on a sustainable basis
2. Private/public utilization of wildlife create productive employment for local people
3. Index of DWLC institutional capacity indicates its capacity to manage Mahaweli wildlife resources

Rehabilitation Assistance

1. Total acreage in paddy production in North-East Province (combined Maha/Yala seasons)
2. Total number of houses constructed for low-income households in North-East Province during the project period
3. Total number of irrigated acres restored in North-East Province
4. Number of persons self-employed in micro-enterprises in the North-East Province.

COMMENTS & RECOMMENDATIONS

1. WATER SUPPLY & SANITATION PROJECT

1. Operation and Maintenance Cost Recovery
2. Billing time

Comment:

This project is in its final stages and due to be terminated shortly. Therefore regardless of the quality of its indicators, it is inappropriate to expend additional effort developing different indicators for it.

Recommendation:

Leave as is.

IRRIGATION SYSTEMS MANAGEMENT

1. To be developed based on new quarterly ME&F reports
2. Research Study by IIMI

Comment:

1. The ME&F System -- developed on my earlier consultancy -- is now operational. A prototype system using some of this data was therefore developed to monitor substantive performance for the 3rd Quarter (April - June 1991). [See Appendix -- Case 5 -- for details.] Three indicators from the ME&F were selected as proxy measures for project Purpose level monitoring:

1. Water Delivery -- i.e. Irrigation Efficiency
2. Preventive Maintenance, and
3. Farmer Organizational Development

For each of these indicators, the data reported is the percentage level of satisfactory performance -- as expressed by the intended beneficiaries -- the chairmen and committees of the farmers organizations whom the project is intended to serve.

The tentative target² is for satisfaction levels of 90% by the end of the project, while the monthly report data indicates the trend for the quarter, as well as a longer term trend.³

A final comment -- this type of data only reflects the status of the project at the time of the report, and can fluctuate from month to month. As such, it is not cumulative.

Recommendation:

Retain and continue use of the prototype system.

2. Research Study by IIMI

Comment:

These appear to be "Output" rather than Purpose-Level indicators.

Recommendation:

Further effort is needed to identify some quantitative indicators of progress at the purpose level and/or apply the PLM Process approach developed for several other project applications.

²Note: The USAID Project Manager was on leave when we were developing this prototype application. Thus the target was only set to illustrate how the system would work; and it should be revalidated when he returns.

³Note: The initial report under this system was in March. Thus we have a four month time series. However, the March 91 data is probably not very reliable as the emphasis during the first month report cycle was on format and procedures for processing the data -- rather than accuracy in the data reported.

MAHAWELI DOWNSTREAM SUPPORT

1. Farm families settled with full irrigation facilities in Zone 4A
2. Non-farm families settled in Zone 4A villages and hamlets

Comment:

These also appear to be "Output" rather than Purpose-Level indicators; however they might serve as an effective proxy for higher level objectives.

Recommendation:

Further study is needed to determine whether some quantitative indicators of progress at the purpose level after resettlement has taken place should be identified; and/or the PLM Process approach applied.

MAHAWELI ENTERPRISE DEVELOPMENT

1. Net increase of 1,250 jobs in Mahaweli SSEs &
2. 9,200 jobs in Mahaweli MLEs by 1995
3. Private Sector free to operate in project area without unfair competition from public sector entities
4. Land tenure arrangements established for private enterprise that are secure and permit land to transfer between private parties.
5. Value of private MLEs fixed assets in the Mahaweli

Comment:

Indicators 1 & 2 appear to be more "Output" than Purpose-Level indicators. Nevertheless if the data is available, they would serve as an effective proxy for the higher level objective of creating permanent private enterprise employment.

While indicators 3 & 4 are desirable objectives, in their present form they appear to be extremely subjective and difficult to define; making data collection and verification an even more precarious process.

If data is available and obtainable for indicator 5, this should be an excellent measure of development progress.

Recommendation:

Further study is needed for indicators 3 & 4.

PRIVATE SECTOR POLICY SUPPORT

1. Instances of private-public dialogue resulting in improved loans, regulations, or procedures which directly impact production
2. Actual movement of publicly owned enterprises into private control/ownership
3. Ownership of publicly traded equity by an increasing number of private Sri Lankan individuals

Comment:

Indicator 1 appears to be extremely difficult to measure, and even so, attribution would be a problem.

Indicators 2 & 3 are excellent indicators -- and in fact are also being used as PPIs for the Mission's PPR.

In addition, the PLM Process prototype has been applied to one aspect of this project -- the University of Maryland contract with Chambers of Commerce.

Recommendation:

Further study is needed regarding indicator 1, or simply dropping it.

Continue with the PLM Process prototype application.

DIVERSIFIED AGRICULTURE RESEARCH

1. Average Yield per hectare of major SFCs (Corn, Cowpea, Greengram, Backgram, Sesame, Groundnut, Chillie, Big and Small Onions)
2. Gross annual extent of major SFCs (above)

Comment:

While these indicators should reflect the end objective of the research process -- as is required of good indicators -- the institution-building aspect of the project is assumed to be the cause of the effect.

Recommendation:

Further study is needed regarding monitoring the institution-building aspects -- perhaps through the PLM Process application.

AGRICULTURE PLANNING & ANALYSIS

1. Policy Decisions being made based upon technical analyses prepared by ministry planning units
2. Planning Units producing studies leading to revised National Agriculture Strategy
3. GSL Budgeting sufficient funds to sustain planning units activities
4. Preparations underway for revision of strategy

Comment:

These indicators are extremely subjective, and meaningless in terms of the project purpose.

However, this is one of the projects to which the PLM Process system was applied.

Recommendation:

Implement the PLM Process monitoring system.

MAHAWELI AGRICULTURE & RURAL DEVELOPMENT

1. Average net farmer family income from irrigated land in System B increased by 50% over income from two paddy crops
- 2/3. Improved production technology to encourage farmers to diversify 50% of Yala cultivation and 15% of the Maha cultivation to increase income by 50% over paddy
- 4/5. Establishment of strong farmer organizations for operation and maintenance of the secondary and tertiary canal system of System B and for undertaking other economic activities. Unit Level Farmer Organizations (ULFOs) to be legally registered and undertaking economic activities; Turn-Out Groups (TOGs) to have membership agreements and be cleaning canals regularly

Comment:

The first three indicators appear to be well defined, and should be good indicators if data can be obtained efficiently, and sustained on a timely basis.

Indicators 4 & 5 are also potentially good indicators -- similar to those in the ISM -- however the criteria are more subjective.

Recommendation:

Review the ISM criteria for Turn-out Groups, and the ME&F reporting system approach for possible simplification in data gathering.

PVO CO-FINANCING II

1. Participatory decision-making activities within sub-projects
2. Project expenditures on DPI activities
3. Extent of Women Beneficiaries

Comment:

Indicator 1 is extremely vague and would appear to present objective measurement problems.

Indicator 2 is Input- rather than Purpose-Level.

Indicator 3 appears to be a satisfactory proxy for determining whether the project is reaching traditionally disadvantaged groups.

Recommendation:

This appears to be a multiple-front institution-building project -- to improve the capacity of intermediary organizations to delivery services. Thus, the PLM-Process approach may be more appropriate. Further study is needed.

DEVELOPMENT STUDIES & TRAINING

1. Improvement of Data Base for policy appraisal.
2. Studies on various topics
3. Number of participants completing training

Comment:

Indicator 1 is extremely vague and presents objective measurement problems.

Indicator 2 is Input/Output rather than Purpose-Level oriented.

Indicator 3 is also an Output.

The PLM Process approach was applied to two major components of this project.

Recommendation:

Continue with the PLM Process approach, and examine whether other major components warrant similar treatment.

Further study is needed to review the participant training aspect of this project.

MAHAWELI ENVIRONMENT

1. DWLC managing Mahaweli wildlife resources in protected areas on a sustainable basis
2. Private/public utilization of wildlife create productive employment for local people
3. Index of DWLC institutional capacity indicates its capacity to manage Mahaweli wildlife resources

Comment:

The foregoing represent ideals, rather than indicators for measurement.

Recommendation:

Further study is needed to determine appropriate indicators for this project.

REHABILITATION ASSISTANCE

1. Total acreage in paddy production in North-East Province (combined Maha/Yala seasons)
2. Total number of houses constructed for low-income households in North-East Province during the project period
3. Total number of irrigated acres restored in North-East Province
4. Number of persons self-employed in micro-enterprises in the North-East Province.

Comment:

The project has a multiplicity of objectives, and these indicators appear to be representative Outputs of the process rather than objectives. Nevertheless, they may well be appropriate proxies of activity if the data can be obtained. Given the area in which the project is operating, objectively verifiable data collection may also present a problem.

Recommendation:

Further study is needed to determine appropriate indicators for this project.

ALIGNMENT OF PROJECTS IN THE PIR WITH THE PPR

While it is premature to recast the Mission Project Portfolio in terms of the Program Strategy, without further research and consultation with the project officers involved, this obviously should be the next step. To this end, the chart on the following page offers some preliminary food for thought.

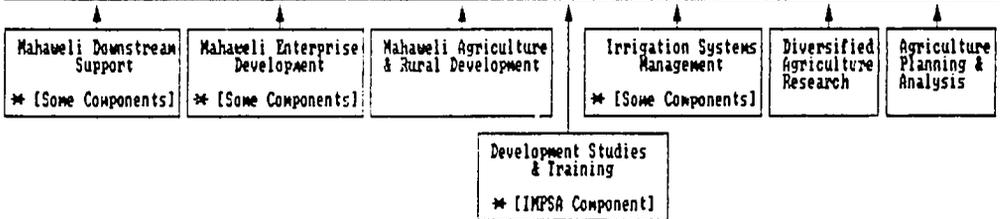
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STRATEGIC PROGRAM OBJECTIVES & MISSION PROJECTS

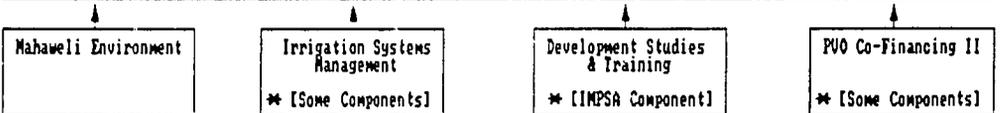
OBJECTIVE 1
SOUND INVESTMENT CLIMATE & BUSINESS PERFORMANCE



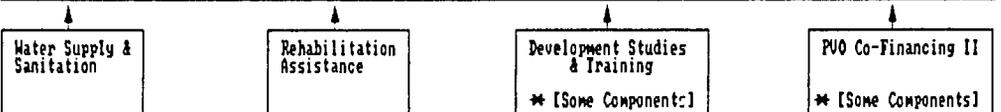
OBJECTIVE 2
DIVERSIFIED & COMMERCIALIZED AGRICULTURAL SYSTEM



OBJECTIVE 3
CONSERVATION AND SHARED CONTROL OF ENVIRONMENT & NATURAL RESOURCES



MISCELLANEOUS
No Apparent Attachment/Relationship to STRATEGIC FRAMEWORK



NOTE: The above "allocations" were made on the basis of a cursory review of the PIR, and have not been verified or discussed with the Project Managers involved. Therefore this chart should be regarded as merely an INITIAL DRAFT to stimulate further discussion, revalidation and refinement by the parties involved.

SUMMARY

It appears that more work needs to be done to review, define, refine and/or establish substantive quantitative Purpose-Level indicators for most of the Mission's projects. Given cumulative targets for the life of the project, S-Curve analysis -- relating performance to budget -- can also be applied to these projects.

Once these steps have been taken, a systematic methodology -- similar to the prototypes already developed -- should be constructed and applied, to assist each of the reporting offices to obtain, record and present the data. In that regard, graphic presentation of time series statistical data and trend projections -- along the lines of the ISM prototype (in the appendix to this report) is recommended.

For Policy-reform type projects which have no substantive quantitative purpose-level accomplishments, I recommend that the Process-type approach -- outlined in the four case studies indicated earlier -- be adopted. This approach -- as well as the S-Curve analysis -- could conceivably be applied to all projects. However, retrofitting the Process approach for the sake of uniformity is obviously a lower priority where quantitative purpose-level indicators are already inherent in the project. [A further case study would have to be conducted to review the utility of having both Process and Substantive indicators for a project.]

With the combination of Process and Substantive measurement approaches to project monitoring, performance vs plan -- in terms of both work and financial accomplishment -- can be aggregated to a Mission Performance Index at the Purpose level. A comprehensive statistically-integrated PIR System will also facilitate the comparative review of projects and their relative contribution to -- or possible dysfunction, with respect to -- the broader Mission Strategic Program as expressed in the PPR. [A conceptual model for this process is outlined in the next section -- however more work needs to be done before it can be operationalized.]

In conclusion, I would emphasize that the approaches are all possibilities teetering on the edge of reality. While "do-able", however, it is my experience that such systems and applications do not come to fruition by issuing edicts to the line project managers. Project Managers at all levels -- in AID, the GSL and the Contractor -- are usually inundated with immediate day-to-day responsibilities. Thus they have little spare time to divert to fine-tuning reporting systems to keep others

informed. Systems should therefore be developed and installed by individuals with a full time responsibility for doing so, in close collaboration with the operating officials -- just as the prototype systems have been developed.

There are many different styles of management and the utility of formal systematic management information systems is frequently not realized by those that never had one. All too often, reporting systems are regarded simply as additional "administrivia" required by the front office, or AID/Washington, and indeed experience with many required reports tends to support this stance. Furthermore, unless used judiciously, such information is the basis for generating additional demands regarding their operations. To offset this generally negative perception, an orientation seminar for all involved is usually beneficial prior to system development and installation. Once installed, training and periodic follow-up should be conducted to reinforce the utility of the system, work the "bugs" out, and make modifications where appropriate.

SYSTEMS INTEGRATION

A CONCEPTUAL MODEL

The charts on the following pages illustrate graphically how project information could be systematically integrated to produce an overall picture of Mission Program Status.

The basis of the program is the individual project -- and in some instances, a major component of sub-project. The projects should be approved from the "Top Down", to ensure that they will conform with the overall Mission Strategy. Each project is unique, and has a different implementation profile and financial expenditure rate, as illustrated by the three Process Charts for three different projects; the three Substantive Statistical Accomplishment Charts which are components of another project, and two S-Curves.

Using the current "percentages of accomplishment" as a common yardstick, the status of the various Projects can be compared on a single bar chart for both physical and financial progress in terms of deviation from plan. Aggregate statistics can then be derived to produce a Mission Management Performance Index, or indices.

The most important characteristic of a Monitoring & Reporting System is that it provides a framework in which managers at various levels of a Program and its contributory projects can function effectively. To this end, data depicted in statistical tables, graphs and charts -- together with summary narrative analyses -- can help get the message across. The information should then be used to formulate the basic agenda of "Progress, Problems, Issues for Resolution, and Follow-up Action Required" for periodic Project and specialized component briefings, meetings and discussions.

If the Monitoring & Reporting System is used conscientiously, the Mission should be able to get a running picture of where the overall Program and its various Projects are -- compared to where they should be, according to their individual Work Plans and Budgets.

The prototype Purpose-level Process System can help managers determine what inputs are required for the project and when they will be required. With responsibility for the overall process and major sub-components identified in this manner, the reporting system serves as a periodic structured checklist to keep managers informed at various levels

without inundating them with a lot of irrelevant, or unanalyzed, data.

A priority system for rapidly identifying potential problems also enables corrective action to be directed where it is most urgently required. With trend charts, the probable consequence of current slippage or acceleration in implementation can also be more readily identified and communicated to other interested parties.

A systematic approach to management has certain limitations and requirements, however, which should be constantly borne in mind. There are many demands for AID resources -- all of which may be intrinsically desirable. Such Project activities may not necessarily fit into a comprehensive Program however, and are not automatically "worthwhile" merely because they have been planned, or their management systems computerized. Although it may help in the analysis, a "system" cannot guarantee a Program's cohesiveness, or a Project's successful performance.

A Monitoring & Reporting System is not a substitute for technical knowledge, or competence. A Monitoring & Reporting system does not make decisions or take action; it is only a process to massage various elements of data that it has been fed, and merely regurgitates summaries of various types, suggested trends, and or courses of action.

Furthermore, a Monitoring & Reporting System requires regular "feeding" with data, without which it will cease to function effectively. In short, a Monitoring & Reporting System does not manage. It merely provides human managers with the capability to do a better job of managing.

**USAID/SRI LANKA
ECONOMIC & SOCIAL DEVELOPMENT
PROJECT PORTFOLIO
MISSION MONITORING SYSTEM**

AS OF: 4TH QUARTER FY 91
(30 SEPTEMBER 1991)

PHYSICAL		SUMMARY STATUS		FINANCIAL	
#	%	PORTFOLIO IMPLEMENTATION ALL PROJECTS		\$M	%
30	100%	100	+	240	100%
10	33%	+	AHEAD OF SCHEDULE	65	27%
15	50%	0	ON SCHEDULE	125	52%
5	17%	-	BEHIND SCHEDULE	50	21%

"Illustrative Only"

(NUMBERS DON'T COMPUTE)

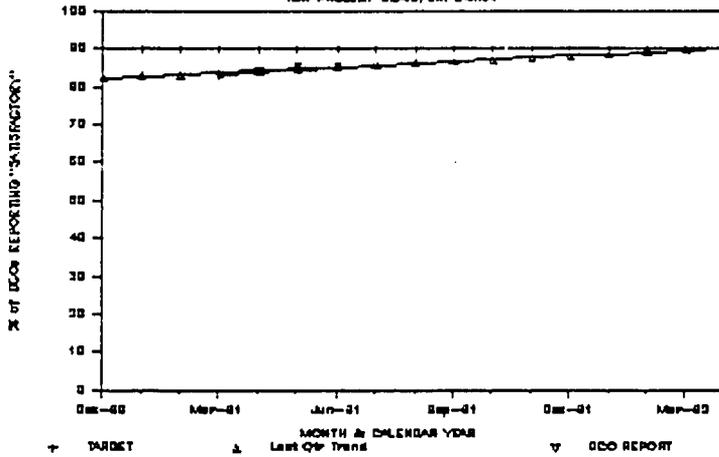
PROJECTS	CALENDAR YEAR		1991		1992		1993		1994		1995		1996		1997		STATUS FINANCIAL					
	FISCAL YEAR QTR		2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	\$M	\$M			
	% STATUS																		PLAN	ACTUAL		
AGRICULTURE																						
1 0083 Ag Planning & Analysis	10%	-	P	A	[Gantt chart showing progress from Q1 1991 to Q4 1994]																13.5	9.6
2 0084 Something else	25%	+	P	A	[Gantt chart showing progress from Q1 1991 to Q4 1993]																18.6	6.9
3 0085 Another Project	40%	0	P	A	[Gantt chart showing progress from Q1 1991 to Q4 1992]																15.0	7.3
PRIVATE SECTOR																						
4 0086 Etc																						
ETC.																						
OVERALL MISSION	30%	+			[Overall Mission Gantt chart]																	
KEY TO SYMBOLS	FISCAL YR QTR:		2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	PLAN	ACTUAL			
PLANNED	P	=====		CAL YR: 1991 1992 1993 1994 1995 1996 1997																FINANCIAL STATUS		
ACTUAL	A	—————>		AS OF DATE																		
PROJECTED		----->																				

GENERAL GUIDANCE

1. Each project should be monitored and progress evaluated on its own merits.
2. The monetary aspects of projects can, and should be summarized.
3. However, summarizing the physical (i.e. percentage) progress aspects is meaningless if aggregated beyond the nominal group categories of "Ahead of Schedule", "On Schedule" and "Behind Schedule" as indicated above.
4. Nevertheless, even classifying projects in these terms gives a useful quantitative picture of the size and status of the Mission's project assistance program; and similar "sub-summaries" can be made to illustrate the scope and diversity of the portfolio.
5. Time series charts to graph the project portfolio in terms of these percentages will also highlight trends in implementation.

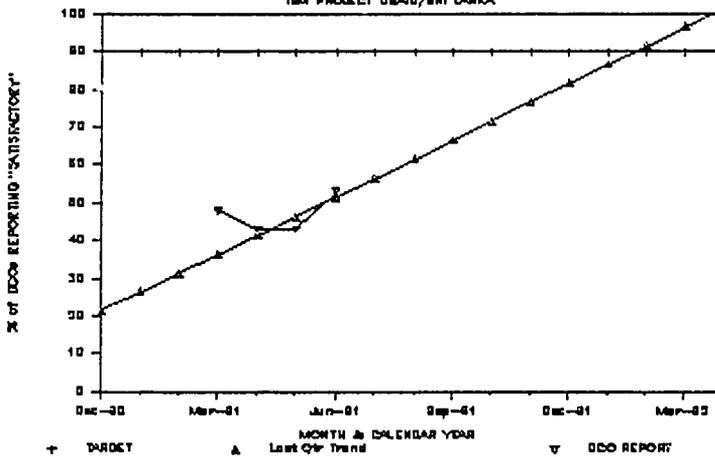
WATER DELIVERY

IBM PROJECT USAID/BRI LANKA



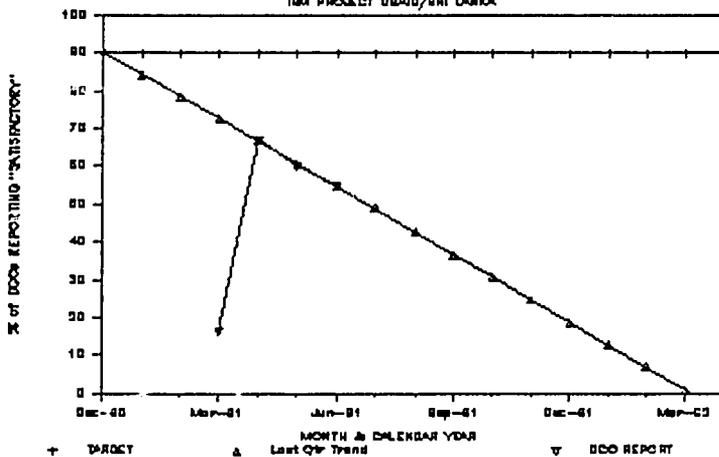
DCO ORGANIZATIONAL DEVELOPMENT

IBM PROJECT USAID/BRI LANKA



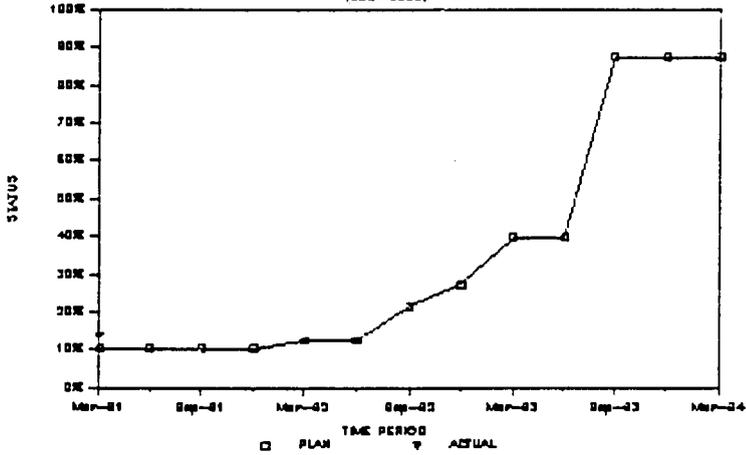
PREVENTIVE MAINTENANCE

IBM PROJECT USAID/BRI LANKA



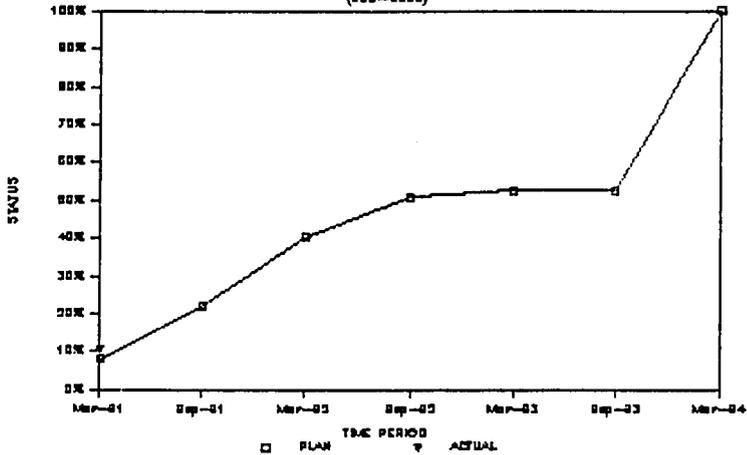
AG PLANNING & ANALYSIS PROJECT

(383-0083)



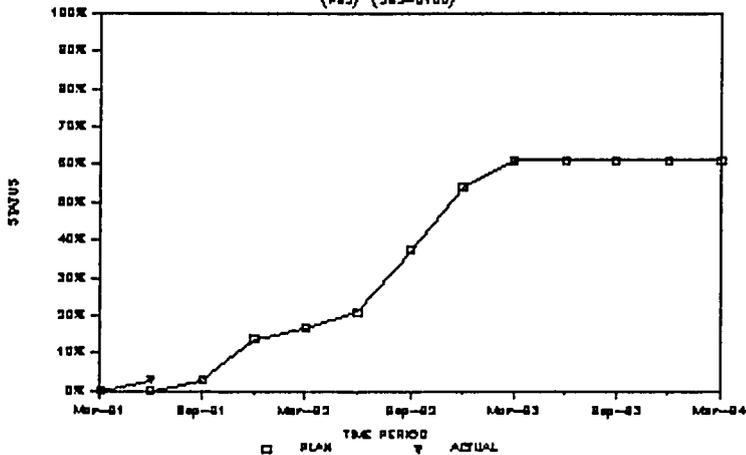
DS&T PROJECT — IRRIGATION MGT POLICY

(383-0088)



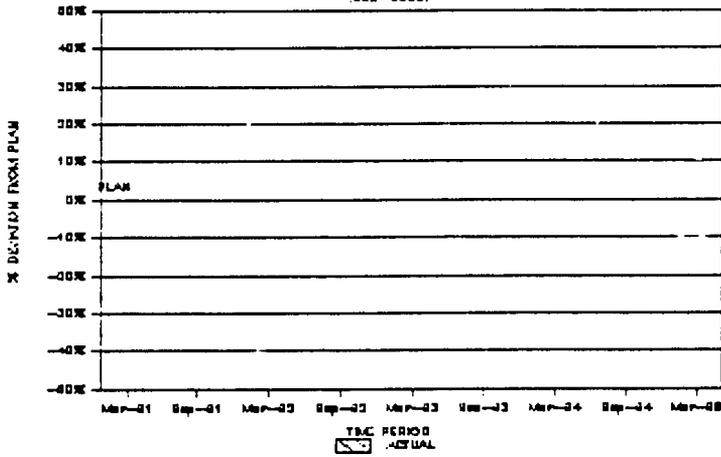
PRIVATE SECTOR POLICY SUPPORT PROJECT

(882) (383-0100)



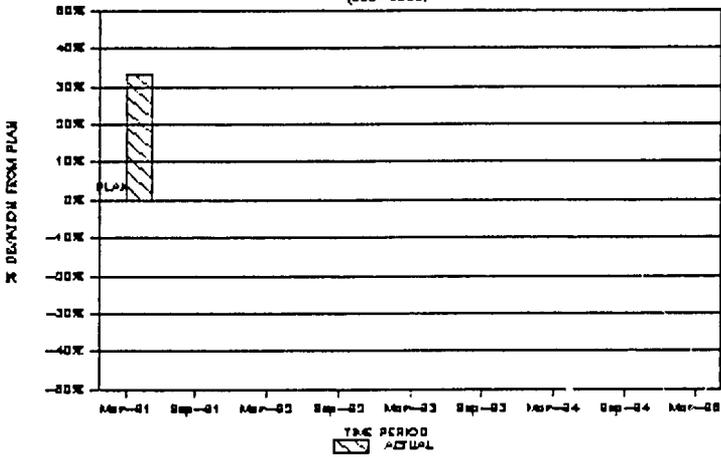
AG PLANNING & ANALYSIS PROJECT

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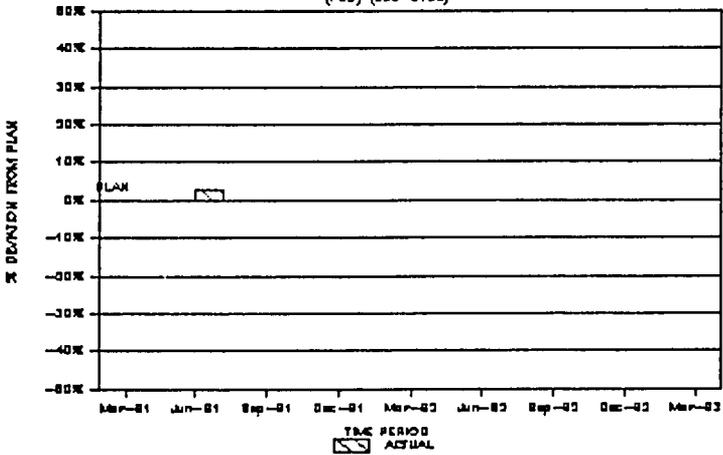
DS&A PROJECT - IMPSA

(883-3088)

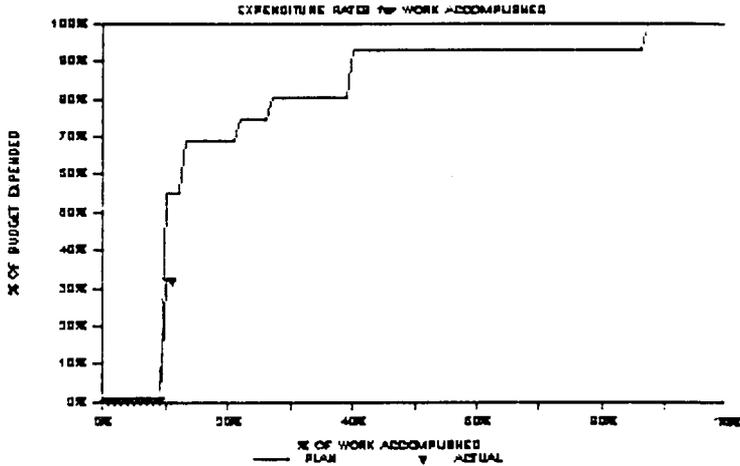


PRIVATE SECTOR POLICY SUPPORT PROJECT

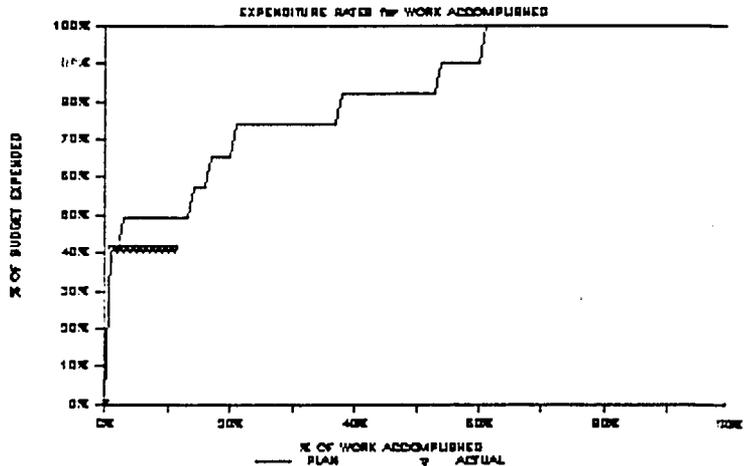
(883) (883-0100)



APAP "S-CURVE" PERFORMANCE ANALYSIS

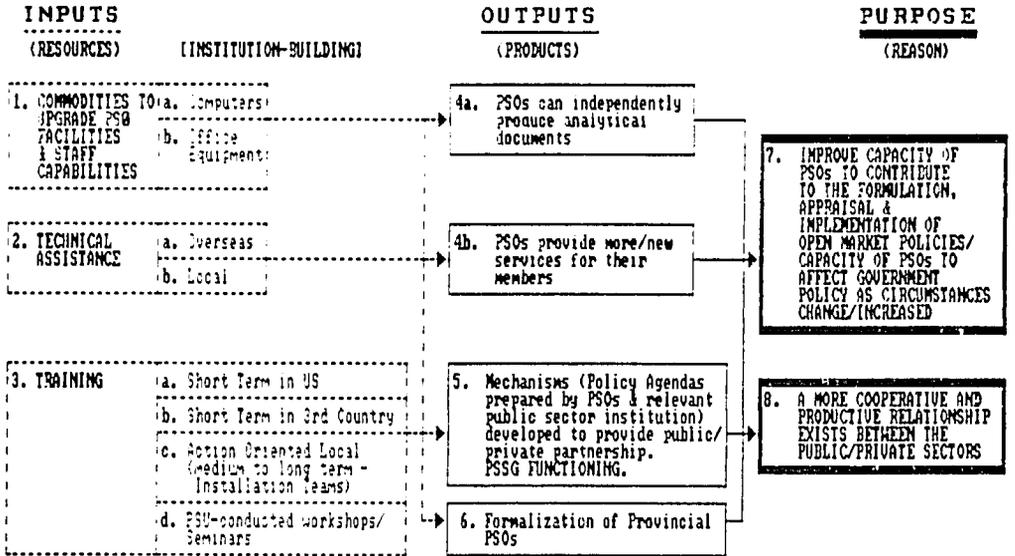


PS2 "S-CURVE" PERFORMANCE ANALYSIS



PRIVATE SECTOR POLICY SUPPORT PROJECT [PS2] (383-0100) ACTIVITY: RATIONALE & CRITICAL EVENTS

Proj Auth Date:
Life of Project:
LOP Funding \$m:
Latest PACD:
Next Evaluation:



PROJECT IMPLEMENTATION & PURPOSE LEVEL MONITORING REPORT
THIRD QUARTER FY 91 (30 SEPTEMBER 1991)

CURRENT STATUS of CRITICAL EVENTS

CHECK IN THE BLOCKS BELOW WHEN:
 1. ACTIVITY IS COMPLETED, and/or
 2. LEVEL OF EFFORT IS SATISFACTORY
 OTHERWISE: - LEAVE BLANK

% Time Elapsed:	%
\$m Obligated:	m
Earmarked:	m
Commitments:	m
Disbursements:	m
Pipeline:	m
% Disbursed:	%

PSU CLIENTS	INPUTS								OUTPUTS								PURPOSE				
	1a	1b	2a	2b	3a	3b	3c	3d	4a	4b	5	6	R1	R2	R3	R4	7	8	R1	R2	R3
CCC																					
NCC																					
FED																					
SLGTA																					
FUPPEA																					
ICA																					
MCIC																					
ICC																					
CENTRAL PROVINCE CHAMBER																					
MATARA BUSINESSMEN'S ASSN																					
NEA																					
CCC - EXPORT SECTION																					
FEDERATION OF EXPORTERS																					
MAHAWELI INVESTORS GROUP																					

NOTE: R1-4 = Reserved -- for possible later additions

APPENDIX**PIR>ISMEF.WKO**

**A SYSTEM FOR INTERACTIVE ANALYSIS OF
SUBSTANTIVE QUANTITATIVE PURPOSE-LEVEL INDICATORS
OF
ECONOMIC & SOCIAL DEVELOPMENT PROJECTS**

CASE 5

IRRIGATION SYSTEMS MANAGEMENT PROJECT [ISM]

[383-0080]

A41: [W8]

READ

	A	B	C	D	E	F	G	H
--	---	---	---	---	---	---	---	---

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MEFISM
=====

An Interactive Analysis of the
IRRIGATION SYSTEMS MANAGEMENT PROJECT
PROJECT PERFORMANCE INDICATORS

under the USAID/Sri Lanka
PROJECT PERFORMANCE MONITORING SYSTEM

FOR USAID/COLOMBO, SRI LANKA
CONTRACT # 499-0000-0-00-1050-00

Dr. Kenneth F. Smith, Project Management Consultant
4517 Twinbrook Road, FAIRFAX, Virginia, USA, 22032
Phone: 703-978-1876

AUGUST 1991

11-Aug-91 05:00 AM

A65: [W8]

UPDATE REGRESSION GRAPHING PRINT SAVE QUIT

Enter Different Data

A B C D E F G H

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TO USE MEFISM

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Select one of the following Options from the Menu

TO ENTER NEW DATA

U - Update Information from IMD Monthly ME&F Report

TO PERFORM VARIOUS COMPUTER FUNCTIONS

R - REGRESSION ANALYSIS & PROJECT TRENDS

G - GRAPH the Last Analysis made

P - PRINT ALL the Data including the Last Analysis made

S - SAVE the Update & Last Analysis

Q - QUIT - without saving anything

NOTE: AFTER REGRESSION, GRAPHING or SAVING,
 THE "AUTOMATIC PILOT" IS DEACTIVATED.
 TO REACTIVATE THIS MENU HIT: [Alt] C

11-Aug-91 05:02 AM

CMD

PROJECT PERFORMANCE INDICATORS USAID/SRI LANKA
 IRRIGATION SYSTEMS MANAGEMENT PROJ LATEST DATA as of Mar 91

A	B	C	D
MONTH & YEAR	[Percentage Levels of WATER DELIVERY	SATISFACTORY PREVENTIVE MAINTENANCE	Performance Reported by the DCOs] DCO ORGN DEVELOPMENT
=====	=====	=====	=====
Dec-90			
Jan-91			
Feb-91			
Mar-91	83.0	16.0	48.0
Apr-91	84.0	67.0	43.0
May-91	85.0	60.0	43.0
Jun-91	85.0	55.0	53.0
Jul-91			
Aug-91			
Sep-91			
Oct-91			
Nov-91			
Dec-91			
Jan-92			
Feb-92			
Mar-92			
Apr-92			
May-92			
Jun-92			
Jul-92			
Aug-92			
Sep-92			
Oct-92			
Nov-92			
Dec-92			
Jan-93			
Feb-93			
Mar-93			

Source: Secretariat, Irrigation System Management Project, Sri Lanka
 Irrigation Management Department, Min of Lands, Irrigation & Mahaweli D

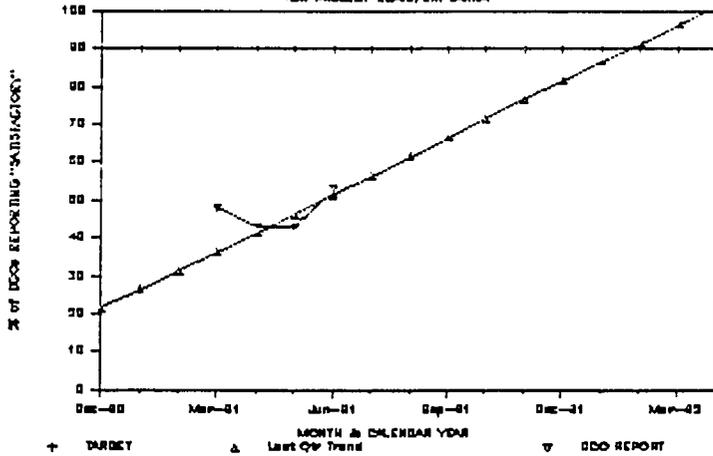
W1: [W1]

Enter independent variable(s), or X, range: W1

W	X	Y	Z	AA	AB	AC	AD	AE	
1	TO PERFORM REGRESSION ANALYSIS: Enter /DRRX						TREND	is GRAPHED as the	
2	X-range, Y-range, C.cput, & Go in one						3rd Variable in		
3	of the appropriate Activity tables below						the "C" RANGE		
4	X RANGE Y RANGE [HIT: [Page Down] for other tables]								
5	MONTH & WATER						TREND = YEAR x X Coefficient + Constant		
6	YEAR DELIVERY						i.e. AD8 = ((X8*AB15)+AC9) = TREND		
7	=====	=====	OUTPUT			=====			
8	Dec-90		*HERE* Regression Output:				81.1		
9	Jan-91		Constant			-678.439	81.9		
10	Feb-91		Std Err of Y Est			0.390305	82.5		
11	Mar-91	83.0	R Squared			0.889208	83.2		
12	Apr-91	84.0	No. of Observations			4	83.9		
13	May-91	85.0	Degrees of Freedom			2	84.6		
14	Jun-91	85.0					85.3		
15	Jul-91		X Coefficient(s)			0.022853	86.0		
16	Aug-91		Std Err of Coef.			0.005704	86.7		
17	Sep-91		=====				87.4		
18	Oct-91		NOTE:- TO RETURN TO MENU				88.1		
19	Nov-91		HIT: [Alt] C				88.8		
20	Dec-91		=====				89.5		
11-Aug-91 05:02 AM									

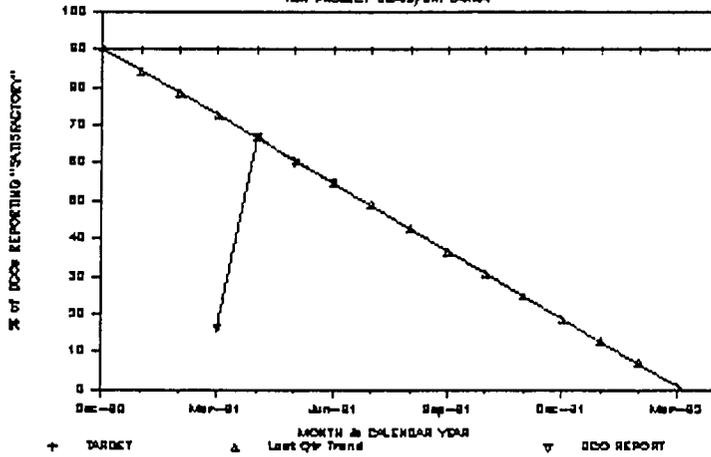
DCO ORGANIZATIONAL DEVELOPMENT

IBM PROJECT USAID/SRI LANKA



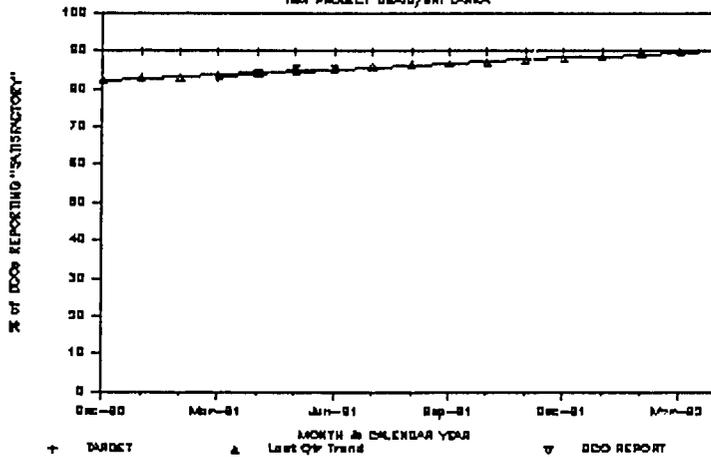
PREVENTIVE MAINTENANCE

IBM PROJECT USAID/SRI LANKA



WATER DELIVERY

IBM PROJECT USAID/SRI LANKA



MENU

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\O      (GOTO)A41~(WAIT @NOW+@TIME(0,0,6))(continue)
\I

\M      (goto)j30~/wtc/wgpd

START   {windowsoff}{home}{GOTO)G2~/WGPE(WINDOWSON){?}~(goto)b8~/
        /WTB/rib8.F35~{?}~/WTC{continue}

CONTINUE (goto)a65~(menubranh a62)
\C

PRINT   {WINDOWSOFF}{goto)a96~^A~/dsda100.m117~PA100~A~SA100~A~G
        /ppral.I38~ag{esc}{esc}{esc}{continue}
```