

PJ-ABL-114
ISN 76832

**MIS DEVELOPMENT: NATIONAL COUNCIL
ON POPULATION AND DEVELOPMENT
(NCPD)**

NOVEMBER 1991

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FAMILY PLANNING MANAGEMENT DEVELOPMENT

**Project No.: 936-3055
Contract No.: DPE-3055-Q-00-0052-00
Task Order No.: TAI 52 KE**

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INTRODUCTION

This report outlines the work accomplished during visits to Kenya by Peter Savosnick, MSH/MIS Senior Systems Analyst, in November and December of 1991. This work was conducted within the framework of the NCPD buy-in from AID/Kenya to the Family Planning Management Development (FPMD) Project. FPMD will continue to provide technical assistance and training to institutionalize the management information systems developed under the Family Planning Management Training (FPMT) project for the National Council for Population and Development (NCPD).

CONTINUED MIS DEVELOPMENT WORK AT NCPD

This report focuses on the second quarterly monitoring visit for the NCPD buy-in and is divided into the following sections:

I. Current System Activities and Modifications

The first section summarizes the activities and program modifications related to the implementation of the information subsystems at NCPD. This section also outlines recommended activities and actions needed to finalize their implementation.

II. DPO Activity Monitoring

The second section reviews some of the issues with the current reporting and monitoring and evaluation system for the District Population Officers and describes an approach to the development of a new activity monitoring system for the district population program.

I. CURRENT SYSTEM ACTIVITIES AND MODIFICATIONS

The Votebook System

The votebook system is designed as a computerized version¹ of the Government of Kenya manual votebook system. The votebook records the NCPD's budget, including commitments, authority to incur expenditures (A.I.E.), and individual payments. Each record in the votebook system uses the unique accounting head for the NCPD (341) in combination with the official Government line item codes to record authority to incur expenditure amounts, commitments and transactions.

One concern raised during the first quarterly monitoring visit (September 1991), was the ability to monitor the difference between approved budgeted amounts and A.I.E. issued. This function was added to the computerized system during this trip. A separate entry is made of the approved budgeted amount which is subsequently reflected in the "Monthly Consolidated Expenditure/Budget Comparisons Report". A sample report is shown in Appendix II.

Since the previous monitoring visit, USAID/Kenya has provided NCPD with a full time accountant, Ms. Emma Njuguna. This will greatly alleviate some of the backlog in the accounts department and should also speed up the external reporting. FPMD recommends that a PC be installed in Ms. Njuguna's office as soon as possible and that she receive training in the Votebook system from MIS Specialist, Peter Kibunga. The votebook system should be fully implemented by the end of March 1992.

The Activity Monitoring System

The activity monitoring system has been developed to track the implementation of individual projects by the NGOs and other agencies (funded through the NCPD budget). The system requires each NGO/agency to submit a project implementation plan (on a standardized format) which lists all the major planned activities for each quarter of the year. The system also requires the NGO/agency to report on the planned activities at the end of each quarter.

Mr. Muchira, NCPD Projects Officer, who is in charge of the Activity Monitoring system, has distributed the activity preparation forms to the NGOs for the activity monitoring system. It will be the responsibility of the NCPD Project Officers to respond to any question that may arise when completing the forms (each NGO has been assigned one Project Officer). The feedback from the Project Officers and NGOs will be reviewed by Mr. Muchira before the next quarterly monitoring visit to Kenya in February 1992.

¹ A sample data entry screen with entry explanations is shown in Appendix I.

During this trip, we modified the editing capabilities of the designed system. The user will now be able to enter data on planned activities for each quarter of the year without having to reenter the line item codes. In addition, a summary report has been added as a standard report option in the report menu. This allows the user to print reports on both the activities carried out to date and activities for any given quarter. FPMD recommends that the NCPD closely monitor the reporting by the NGOs to ensure that they are able to properly complete the activity preparation forms and send the quarterly activity reports to the NCPD. In the past, no linkages were made between the activity reporting and the financial reporting. The incentive to report financial information on time is greater than the incentive to report activity data, since delayed financial reporting from the NGOs will result in a delay of the disbursement of additional funds. FPMD recommends that the Project Officers ensure that both the NGO's activity reports and the quarterly financial reports are received at the same time. A delay in reporting activity information should also result in a delay in the disbursement of additional funds.

The NCPD Projects Database

The project database was developed to keep up-to-date baseline information on all ongoing projects. The database stores the following information for each project:

- Project title
- Name of NGO
- Project Code and Project Number
- Start and End date
- Yearly Project Cost (estimates)
- Name of Donor
- Name of NCPD Project Officer (in charge)
- Project Description
- Major Objectives of the project

In addition to the project database, a project matrix is maintained (as a Lotus spreadsheet), which summarizes information on all the projects. (The matrix does not include a project description or the major objectives of the project). The information in the project matrix is updated on a regular basis and used by the senior managers to give them a quick overview of all ongoing projects. It is also being used to keep track of the allocation of project responsibilities to the Project Officers.

As pointed out during the previous monitoring visit in August 1991, the project database will be considered fully operational when data from all ongoing projects has been entered into the database. This remains a major task of the NCPD project officers. As during the previous monitoring visit, the information that has been entered in the project database to date is incomplete and needs to be edited and updated by NCPD before March 1992. During the latter part of 1991, the work of updating the project database was hampered by high staff

turnover. Three different Project Officers were at different times assigned the task of ensuring that the project database was maintained. As a result there was confusion as to roles and responsibilities. During this monitoring visit, Mr. Mwangi, NCPD Project Officer, was placed in charge of the population matrix and the project database. FPMD recommends that during the initial implementation phase, Mr. Mwangi should provide a bi-monthly progress report to NCPD's Acting Director, Ms. Margaret Chemengich.

There remains some confusion among the Project Officers as to whom is responsible for maintaining the project data base. However in the original design, the design team, comprised of senior managers and the MIS consultant, determined that it was the Project Officer's responsibility to maintain the information in the project data base. Data entry on the other hand is normally carried out by the data entry clerks. (A Project Officer may be assigned one or more projects).

The Financial Monitoring System

A system of monitoring the financial activities of the NGOs through a microcomputer based financial reporting system has been developed and tested. The system is used to monitor all projects that are funded through the NCPD. This system is comprised of four parts, a budget preparation form, the financial reporting form, a standard set of line items and codes and a standard set of reports from the computer based system. Once the budget preparation form has been submitted by the NGO and the budget approved, the data is entered into the computerized system. A standard reporting form showing the budgeted line items for each quarter will then be printed and sent to the NGOs. This financial reporting form contains a blank field, where the NGO will fill in the reported expenditure at the end of the quarter.

During this visit, the finance and administration department distributed the budget preparation forms to all the NGOs. Included with the forms were guidelines and instructions on how to complete the forms. Each form also included the "total expected amount"² that would be dispersed by the NCPD to the NGO during the year. Feedback from the NGOs will be reviewed by Mr. K. Chepsiror, head of the Finance and Administration, prior to the February monitoring visit. In addition, a new financial reporting form was drafted and distributed to the DPO's for comment and feedback³.

² The disbursement of funds to the NGO is effected bi-annually. The NGO take the total amount shown on the budget preparation forms and distributes it over the specific line items. It has happened several times during the past few years that the NCPD has been unable to disperse the full amount budgeted for the year and reduced the amount of the second disbursement.

³ See Appendix III. for a copy of the DPO reporting form.

Service Statistics System

The Division of Family Health (DFH), assisted by the IPS project, is responsible for collecting and processing national statistics on family planning. This is sometimes referred to as the Health Information System (HIS). In the original design, the HIS is supposed to provide a complete copy of the FP service statistics to the NCPD. To date, the NCPD has only received a small portion of the national statistics. This is in part due to the slow implementation of the project and the inability of the HIS to collect data from the NGOs and to consolidate this data with data from the logistics management information system (LMIS). As the IPS Project will soon end, the roles and mandates of the DFH and the LMIS are being redefined. Steps are being taken to use a single commodity-based system for contraceptive logistics and service statistics, using quantities distributed to clients to calculate CYP. The NCPD must clearly identify its information needs and assign a senior staff member to participate in MOH discussions regarding the National Family Planning Service Statistics system (NFPSS). Because it is impossible for NCPD to have a parallel system in the field to capture all national data, it is important that NCPD's needs be considered and incorporated into the LMIS-HIS system, especially in the area of CBD and NGO family planning statistics.

During this visit, Mr. Takona, NCPD Project Officer, was placed in charge of the service statistics system. Mr. Takona is currently compiling a report on the cost benefit of family planning in Kenya as part of a USAID funded research project in Kenya (FAMPLAN). During December, Mr. Takona will conduct visits to the NGOs to review project reporting and the flow of information, especially in relation to the flow of FP service statistics. Mr. Takona's review will focus on the issues and problems in the reporting of service statistics. FPMD will conduct an in-depth review of issues and implementation activities during the next quarterly monitoring visit in February 1992.

NOTE: The service statistics systems will be a major focus during the February 1992 quarterly monitoring visit to Kenya. The FPMD-MIS consultant and resident advisor will also attend the LMIS-HIS "stake-holder" meeting, arranged by the DFH, to be held in Nairobi on February 11.

Two workshops will be held during February; one with the Acting Director, Ms. Margaret Chemengich, and the Head of Finance and Administration, Mr. Chepsiror; the other with the Project Officers. The key issues to be addressed during these workshops are:

- remaining implementation activities;
- use of output from the systems for improved management decision making;
- coordination and communication between divisions for each one of the subsystems implemented;
- locus of responsibility within NCPD's structure for operation and maintenance of the subsystems; and
- the integration of these subsystems into NCPD routine management and operations.

II. DPO ACTIVITY MONITORING

NCPD's senior managers have recognized the importance of the District Population Officers (DPOs) in the work being carried out by the NCPD at the District Level in Kenya. Because of the central role that the DPO project can play within NCPD, it is important that both time and effort be given to the design and use of a monitoring and evaluation system so that accurate, relevant, and timely information will be produced. The DPO activity monitoring system will be compatible with the NGO activity monitoring system. It may be necessary to include an additional set of activities and codes in the database and additional reports in the computer program.

The current DPO monitoring and evaluation system relies nearly exclusively on the quarterly reporting and the quarterly review meetings. The lack of a formal and systematic reporting system is recognized as one of the weaknesses in the current flows of information from the DPOs to the NCPD headquarters.

To ensure that overall program objectives are met, strong links must exist between the proposed DPO monitoring system and the NCPD's overall project management system. The value of the DPO monitoring system will be measured in its ability to facilitate project management and to assess the accomplishment of project objectives. The system must avoid the duplication of data collection. For example, it should not collect family planning service statistics that are already being reported through the national family planning information system. The DPOs can play an important role in facilitating the flow of information from the field to the HIS and/or NCPD headquarters. In turn, the DPOs should receive regular feedback from the NCPD-MIS that relates specifically to the districts they work in, and allows them to compare the performance of different programs within the district and between districts. The monitoring system must also be dynamic enough to capture district-specific nuances that will contribute to the policy making process. (This was also pointed out in the recently conducted evaluation; "The quarterly reporting formats of NCPD should carefully solicit the opinion of DPOs on the many important issues that NCPD should monitor and feed into the policy making process."⁴)

The selection of standard indicators for the DPOs work should be based on the types, scope and complexity of the interventions. These standard indicators will probably need to be augmented with additional indicators specific to the projects organizational needs. However, despite the heterogeneity of the DPOs' work, there is a need to form a uniform set of standard indicators of performance.

NOTE: A set of standard indicators have been developed for monitoring the services component of the various programs within family planning. (The NGO Activity Monitoring

⁴ Evaluation of the Population Planning and Policy Implementation at District Level In Kenya Project, (Dr. Torben B. Larsen, SIDA).

System). These indicators are easy to collect, and most of them can easily be compared to the line item expenditures.

It is only through the use of standard definitions and indicators that meaningful comparisons across districts can be made which will allow the project managers to make competent decisions regarding the progress and impact of the project. The objective is to develop a workable monitoring system without duplicating the efforts of other existing systems.

It is important that the DPOs participate in the development of the proposed activity monitoring system. To this end, an eight-step model⁵ in the monitoring and evaluation process was outlined and distributed to the DPOs in November 1991. The objective is to give the DPOs a conceptual understanding of monitoring and evaluation and how they can apply this understanding to the development of a monitoring system and to the management of the district project activities. The DPOs have been asked to provide feedback by early January 1992. NCPD's senior managers and FPMD's MIS consultant will review this feedback during the next quarterly monitoring visit in early 1992. This feedback will play a decisive part in the development of a functional activity monitoring system. This eight-step monitoring and evaluation process has also been used in this report to highlight the issues that will determine the parameters of the activity monitoring system.

Monitoring and Evaluation

The eight-step process outlined in this report recommends a broad approach to the development of monitoring and evaluation systems. The process starts with setting objectives and proceeds until the monitoring and evaluation system is complete, and plans for its use are in place. The process outlined in this report is built upon the following steps:

1. Set Objectives
2. List Activities
3. Select Indicators
4. Set Targets
5. Collect Data
6. Analyze Data
7. Generate Reports
8. Make Decisions & Take Action

This systematic approach provides a model which should be used by everyone within the DPO project to begin the development of an activity monitoring system. Furthermore, it emphasizes the importance of linking the development of the activity monitoring system to the overall monitoring and evaluation of the project.

⁵ "Monitoring and Evaluation of Family Planning and Child Survival Programs:, (LeSar, Mitchell, Northrup, Harrison) Management Sciences for Health, Boston, MA.

As with the development of the other subsystems at NCPD, the activity monitoring system is being developed interactively with the system users so that a practical, easy to use system can be developed.

1. Set Objectives

The first step in the process is to set objectives. Clear objectives are an essential component in the planning process. Although it may seem self evident that we must know the desired end result before we can decide how to measure our progress, in actuality, many projects are very general in scope. An objective should be sufficiently limited in scope so that it may logically be reached within the stated time period. A program will typically have many objectives, and it is these objectives against which the success of the program should be ultimately judged.

Traditionally, the mechanics of choosing appropriate objectives are to:

- Decide what one hopes to accomplish in a specific program;
- Determine how much can realistically be done in a given time period;
- Consider the constraints such as available personnel, cost ceilings, and infrastructure requirements which will limit the possible impact of a program;
- Choose how you will measure the outcome.

In reality, it is harder to set objectives since accurate data on past experience is often impossible to obtain. This is precisely why a monitoring and evaluation system is important; it enables managers to know when original estimates are inaccurate and must be corrected. The most important question is: What do we want to measure when we are talking about a monitoring and evaluation system for the DPOs? The methodology suggests that we start by taking a closer look at the objectives of the DPO project, and asking ourselves if they are SMART⁶ enough. According to the project document, the objectives at the district level are to:

- Increase population awareness;
- Improve use of demographic data in district planning; and
- Coordinate FP activities (especially the CBD).

These objectives only indicate a general direction for the project, instead of specific desired outcomes. They are not sufficiently specific or time-bound to be measurable. In addition, without the specificity and time element, it is impossible to know how achievable or realistic

⁶ Objective should be SMART; Specific, Measurable, Achievable, Realistic, Time bound.

the objectives are. In this respect, the "Immediate Objectives of the Project"⁷ listed below are more useful:

- Determining priorities for family planning and population in the districts;
- Developing District Population and Family Planning strategies;
- Strengthening the management of the CBD program;
- Improving the capacity for coordinating and implementing district level Population and Family Planning activities;
- Institutionalizing the capacity to include demographic factors in the district level planning process;
- Providing NCPD with the knowledge and experience to provide relevant and appropriate back-up to population planning at district level;
- Providing NCPD with the experience to deploy DPOs in additional districts;
- Identifying areas for special attention in future activities of NCPD.

This list of project objectives is both extensive and specific. However, several of the objectives will clearly need further refining to include a time dimension which is necessary if we wish to know when we have accomplished the objective or how much we have accomplished. FPMD also recommends that a review be made of all the project objectives to determine which objectives can be made more specific and time-bound.

The approach we are recommending requires us to reexamine the roles and responsibilities of the DPOs as well as understand the extent and nature of the family planning activities in the districts. The recent evaluation of the project⁸ outlines several of the areas to consider:

- The family planning activities that are being carried out in the district;
- The DPO visits that are carried out in the district;
- The DPO's interaction with counterparts from the other institutions and organizations;
- Contributions by the DPOs in tours and barazas;
- Role of the DPOs in the District Population and Family Planning Committees;
- Role of the DPOs at presentation ceremonies for field workers and ceremonial occasions.

⁷ Evaluation of the Population Planning and Policy Implementation at District Level in Kenya Project, (Dr. Torben B. Larsen, SIDA).

⁸ *ibid.*

2. List Activities

The second step in the process of developing a monitoring and evaluation system is listing activities. This step is often referred to as an implementation plan. Each objective will normally have many activities associated with it which need to be successfully completed in order to reach the objective. While the selection and listing of activities will vary considerably depending on the type of program which is being implemented, there are a few guidelines which may be helpful in stating those activities for the monitoring and evaluation system.

An activities list should include all the activities necessary to accomplish a given objective. If important activities are left out and not monitored, we might think we are progressing satisfactorily towards achieving an objective when in fact we are not. For example: In the objective related to strengthening the management of the CBD project; if we do not include an activity such as "conducting an annual survey to update the existing CBD database showing the manpower strength and placement of CBD workers and supervisors by sublocation" we may find that after many months of work we are unable to make accurate statements about the coverage of the CBD program(s) in the district.

Activities, like objectives, should be measurable so that one knows, at any point in time whether a stated activity has been successfully completed. Since activities represent the operationalizing of the objective which are measured in our monitoring and evaluation system, it is critical that we understand how we will actually measure our activities.

Each objective should have a separate activities list. While some activities may help meet several objectives, all activities should be included for each objective to avoid confusion. For example, making a presentation of the District Health Survey (DHS) results to the District Population and FP Committee could be a part of the strategy to improve the use of demographic data in district planning (objective A) as well as help increase population awareness at district level (objective B). The listing of objectives and activities should take place in the district specific annual work programs. An obvious starting point is the "main activities" of the DPOs shown below:

- Maintaining running contact with all family planning agencies in the district;
- Maintaining running contact with members of the district administration;
- Acting as secretary to the District Population & Family Planning Committee;
- Participating in meeting of the District Education Committee (DEC) and District Development Committee (DDC) as well as other committees (e.g. health, evaluation);
- Assisting as resource persons in seminars and training course organized by others;
- Participating in tours and barazas organized by DCs and DOs occasionally Provincial Commissioners;
- Organizing short seminars for all family planning agencies in the district;

- Organizing meetings to discuss solutions to immediate problems in the districts;
- Assisting in solving supply bottlenecks through loans of contraceptive among agencies;
- Assisting agencies with write-up of project proposals and their submission;
- Assisting agencies on job descriptions and on job interview panels;
- Giving demographic and family planning advice to organizations and individuals;
- Distribution of IEC materials produced or sponsored by NCPD;
- Assisting NGOs with transport when needed for special occasions, including ferrying of tubal ligation cases;
- Assisting donor agencies with project implementation (especially JICA, KDHS, and World Bank);
- Conducting donor missions and government officials to see project activities;
- Preparing of inventory of family planning projects and District Population & FP Status Report; and
- Writing quarterly reports, and general administration, office and staff management.

According to the evaluation, the DPOs spend most of their time on the following activities:

- IEC and training activities, (seminars, barazas, training courses etc);
- General coordination and supervision of FP activities (including site visits);
- Coordination of CBD Projects (including site visits);
- Data collecting, research activities, advisory services etc.;
- District Committees ;
- District Population & Family Planning status reports;
- General administration (quarterly reports, personnel, setting up office etc.); and
- Reporting back to the NCPD on issues of concern

The question we have to ask is which of these activities should be reported to the NCPD Headquarters on a regular basis, possibly on a standard form, and which activities should be considered non-standard? Although the work of the DPOs does sometimes vary significantly from one district to another, as pointed out in the evaluation, there is a need for a more structured approach to setting of priorities. In addition to planning and reporting in a structured manner on some of the standard activities, there is a strong need to assess the performance of the different FP project in the districts in more general terms⁹. Regular activity reporting should also be augmented with information from the District Population &

⁹ The evaluation report points out that the DPOs should also report back in general terms on the strengths and weaknesses of the agencies and programmes in the district. However, the DPO should not be involved in actual evaluation unless specifically requested to do so by one of the agencies.

Family Planning Committee meetings that need to result in some form of follow-up from NCPD Headquarters.

The presentation of the DHS results in the District Population and FP Committee is an example of one activity in the objective of "improving the use of demographic data in district planning." There are unquestionably several other activities that need to take place for this objective to be accomplished. By trying to list all activities we will ensure that we explore several strategies that we may want to utilize to reach this objective. This will be true for all the objectives of the project. One example of another activity that we might want to explore is the development of a training program for the members of the District Population and FP Committee members. This could result in the development of a training plan, which would also have a set of objectives.

Review of current reporting system

The recent evaluation of the existing reporting system shows that the DPOs are currently submitting quarterly activity reports. However, these reports are essentially narrative rather than analytical. They are not systematically analyzed by NCPD Headquarters and generally DPOs get little or no feedback. It must be a major role of the project managers to ensure that the DPOs receive feedback so they can see that their reports are taken seriously.

In addition to the routine information, each quarterly report should solicit facts and opinions through a questionnaire on a specific topic of interest to NCPD. The output from the activity monitoring system, complemented with output from NCPDs, and other management information systems, can be an important element in the District Population & Family Planning Status Reports. These in turn would feed into the District Population & Family Planning Strategies.

Suggested outline for quarterly reporting

Project Reports should be completed for each district. Below is a suggested outline for the quarterly report. This outline is based upon many of the elements of the current reporting system. (The DPOs and Project Officers in charge of the project have been asked to provide comments and suggestions on the outlined format).

a) Title

The title of each quarterly report should state the district, quarter, and the DPO in the district.

b) Objectives

The objectives stated in the quarterly report should be the major objectives for the district. They should not be a repetition of the project's objectives.

c) Implementation

This section will cover the significant activities planned and carried out for the quarter. Accompanying this should be an analysis of any problems encountered during the quarter pertaining to the planned activities. NOTE: The activity monitoring system will form the basis for this section. At the beginning of the year, each DPO should plan the major activities for the year. These activities should be quantified e.g. number of training sessions, number of committee meetings, number of functions etc. and allocated to the quarter in which they will occur.

d) Quarterly Evaluation

Were the objectives achieved for the quarter? While this analysis will take into consideration whether or not planned activities were carried out, this is not the only indicator that objectives are being met. Other significant activities or events in the district can have a very negative (or positive) effect upon the objectives of the district. NOTE: Each objective is liable to have several activities, each of which may start and end in different time periods (quarters).

e) Annual Evaluation

The annual report and evaluation should summarize the quarterly reports with emphasis on determining the extent of achievement. There are several sections in the final evaluation:

- What significant changes were made during the year to the activities of the project in your district?
- What lessons were learned in relation to the future of the project?
- How will these lessons be used to improve the performance of the project in your district?
- Given the performance of the project in your district, its costs and contribution to the overall objective, how should it be continued?

The annual report should include a description of the activities that are a benefit to family planning but are not necessarily part of the work program. For example, the types of activities that incur little or no cost but contribute to the promotion or development of family planning in Kenya.

3. Select Indicators

The third step in this process, the selection of indicators, is often considered the core of designing a monitoring and evaluation system. It is the process of defining what will actually be measured during the course of a program. Indicators will have certain characteristics which include the following:

It must be representative: It must tell us about the status of a program which will allow better decision making or suggest corrective actions. For example, the indicator "Number of training sessions held" tells us about the direct outputs of our training program. If we find we are training an inadequate number of committee members for our program needs, an expansion of the training program may be required.

It must be measurable: Since we will use an indicator to measure our status with regard to achieving an objective, it must be possible to know whether we have made any progress since the last time we collected the information. In many cases this may mean that an indicator should be quantifiable, but some indicators may need to be qualitative. "Number of NGO coordination meetings held" is easily quantified, while a measure of the effectiveness of the coordination may be more appropriately qualitative.

It must be economical: Every indicator takes resources of time and money to collect. It is important that we balance the cost of collecting an indicator with the value that we will get out of the information. In a family planning program the "Number of health workers trained" should be easy and inexpensive to collect and give us meaningful information; "Number of children never weighed" will be very difficult and expensive to collect and will probably not provide any useful information.

It has a time dimension: Indicators typically fall into one of 4 types related to the sequencing of activities in a program's life:

- **BASELINE INDICATORS** define the status at the baseline period, i.e. at the beginning of programs before which changes due to the current plans take place.
- **LEADING INDICATORS** measure changes that occur early in the program when internal systems are changing but when services to people have not changed significantly. These indicators describe the resources allocated or scheduled for allocation which are necessary before changes in outputs or behavior can occur. It is important for managers to pay careful attention to these leading indicators as they will be the earliest indication of a successful program. One example would be the placement of DPOs in the district.
- **COINCIDENT INDICATORS** measure changes that occur in services to people and take place in the middle years of a program when it is increasing its size and effectiveness. For example, in a family planning project, monitoring the number of

client contacts and active users occurs after the workers have been trained (LEADING INDICATOR) and after they have started working in the field.

LAGGING INDICATORS measure changes in the impact period which occurs late in a program after the services have been in place for some reasonable time. These indicators measure the program's long-term results on the population and family planning projects in the district.

Most effectiveness and impact indicators are in this final category as well as most indicators used for final evaluations of program performance. Note however, that because these indicators often do not change until late in a program, they are less useful for guiding short term decision making during program implementation. They are more useful for long term planning and for planning subsequent programs which are being considered. Another way to view the indicators is to look at indicators for input, process, output, result and impact.

- Input Indicators e.g. total commodities received, training received by project staff etc.
- Process Indicators e.g. number of clients seen by each service provider per day.
- Output Indicators e.g. number of new clients, by contraceptive method.
- Result Indicators e.g. percentage of continuing users in the target population.
- Impact Indicators e.g. percentage of women achieving the desired total fertility rate.

The process for selecting indicators is difficult since there are many considerations which must be kept in mind for each indicator. The first step in the process is to answer the following questions for each activity:

1. What are the questions we need to answer to know whether we will accomplish our activity?
2. What information do we need to answer these questions? (indicators)

FPMD recommends that the Project Manager and senior Project Officers review the feedback from the DPOs to determine a related set of indicators for the project. This requires an understanding of the relationships between the activity we hope to accomplish, the information collection system, and the feasibility of collecting certain kinds of information. Many DPOs will find that they require additional indicators to monitor activities unique to their district.

4. Set Targets

The process of setting targets is one of the most important and yet least often performed steps in program planning. This is often because many managers have difficulty setting realistic targets. Without good baseline data on which to set appropriate targets, managers often prefer to use vague descriptive targets rather than quantitative ones so they cannot be held accountable for interim results. This will make it difficult to identify early on when a program is getting off track. The lack of explicit targets also makes it difficult to set priorities and coordinate the efforts of different groups working on the same program, as mixed and sometimes contradictory messages may be given about where to focus resources.

Three methods are commonly used for setting targets. The first is to divide the expected program outputs by the number of years in the program to come up with an estimate of annual outputs. Thus if the DPO project has an objective of identifying and developing 20 new FP projects by the end of the fourth year, a target of 5 new projects a year is set. This method, while mathematically correct is not usually accurate since a new program should expect fewer project opportunities in the first year when the DPOs do not know the districts well. Since the targets are unrealistic, we do not know after one year whether we are in fact on schedule for meeting our final objective or not.

The second method is to take the previous year's result and add 10% for this year's estimate. If a program has been performing well, this method may give us a sensible target, but how do we know whether or not a program is performing well? What we accomplish with this form of target setting is measuring whether or not it is performing as well as last year. If there are correctable problems which occur year after year, we will not know about them since our targets are based on comparative performance, rather than absolute standards.

The third method, which is the most difficult, but also the most useful, is to set targets according to a normative standard based on past experience or from a review of program capabilities. Using the example of establishing new projects: If the target is to help develop 20 new FP projects within four years, there are several factors we have to take into consideration. First we have to define what we mean by "a new FP project." Unless we are explicit about what we mean by a new project, it will be extremely difficult to measure results. If we define a new project as any new FP activity in the district, we could include the extension of existing projects and this target might be easy to accomplish. However, it will be harder to establish a new FP project if our definition states that it must be funded through the NCPD. The following are some examples of the types of factors that will influence the target setting:

- How many new FP projects have been started in the area during the past five years?
- Do we know how long it takes to initiate a new project?
- What is the prevalence rate in the district?
- How many projects are currently in operation in the district?

- How many people are these projects serving and are all parts of the district served?
- How do the services in district A. compare with those in district B. etc.?

If you have no experience of starting new projects, it will be necessary to make some sort of estimate of the factors above, possibly through collecting some baseline information. While this may seem an arduous and time consuming activity, it allows us to make more qualified estimates. We should also monitor the first years activities very closely and be prepared to make adjustments to our methods of developing new projects based on the data collected through the monitoring and evaluation system.

5. Collect Data

The issue of *how*, *when*, and *from whom* to collect data is a difficult one for the program planner and manager since he is constantly forced to balance the desire for more and better data with the cost in time, and money of collecting that data.

There are several key issues which should be considered in selecting a data collection method:

Value vs. cost: All data costs time and money to collect, and some data collection methods, especially surveys, are very expensive. It is important to balance the cost of data collection with the value of the information it will provide.

DPOs workload: Almost all data will be provided by the DPO who are already busy. It is essential that systems be designed which do not overload the DPO with the filling out of forms and other reporting requirements.

Data Quality: Collected data must be representative and accurate. Biases are often inherent in data collection systems and must be considered in deciding what data to collect and how to collect it. For example, if CBD workers are rewarded for the number of new acceptors, we can expect an upward bias in the reported numbers of acceptors. Some method of independently assessing the accuracy of reported data must be built into the system to insure data quality. It is also important that incentive schemes do not have the opposite effect of reducing the quality of services and hence the effectiveness of the program.

6. Analyze Data

Data analysis is the process of transforming raw data collected from the field into information which can be used by the planner or manager for understanding program status or making better decisions. Data analysis is often broken into two distinct stages. The first stage is data processing, when data collected from multiple sources and at different times are

combined into one general data base. Often data are grouped into different levels of aggregation for use by different levels of program managers. Thus, for example, information on the number of DPO site visits during the quarter might be presented as individual tallies for the project manager, and regional and national totals for the NCPD Director.

The second stage of data analysis is data interpretation in which data that has been processed is presented to planners and managers in an easily understandable format. The choice of presentation is an important factor in the accurate interpretation of data; it can make the difference between useful information and uninterpretable data. An example of this is a program manager trying to predict the number of new CBD workers that should be recruited for the coming year. He is presented with the yearly summaries from each worker in the past year. This data is very long and not very helpful to a busy manager. On the other hand, a table with the targeted number of CBD workers by region, number of CBD workers trained during the year by region, number of CBD workers at the beginning and end of the year, number of acceptors by region and size of target population by region provides him with the information he needs in a concise format.

7. Generate Reports

A key area for improving decision-making is to improve the quality of reports so that they communicate information more clearly to their readers. The problem most managers have is not too little information but too much. Reports should be designed to present a manager only what he or she needs to know.

It is very important that indicators be displayed in a format which facilitates their use for decision making and gives the reader an immediate picture of the program status. There are several considerations in designing such a format.

Whenever possible, information collected on indicators should be presented side by side with the targets for those indicators, so a manager can see at a glance whether a program is on schedule with its plans. Data should be combined with other indicators before being presented so that the picture makes sense to someone scanning a report. For example, information about number of acceptors by region might be grouped with information about the methods used. In the same way, trend lines which show present performance compared to past performance, or data comparing different regions at the same time may clearly point to problem areas.

Information which is reported graphically is faster to read, easier to understand, and often shows relationships not readily apparent in tables or written reports. Field staff can and should be taught to graph trend lines and comparative data for their own use and for reporting purposes; microcomputers can assist in this task where they are available. Narrative sections should be succinct and analytical.

Two forms of analysis are crucial--*trend analysis* and *comparative analysis*. *Trend analysis* presents a graphic representation of events during several time periods and is useful for following the progress of one location or indicator over time. *Comparative analysis* compares two or more locations or interventions and facilitates analysis of relative success between two areas.

8. Make Decisions & Take Actions

A monitoring and evaluation system is of little use if it does not result in taking appropriate action. Most often, the success of a family planning program is based on the ability of program managers to use new and unexpected information to ensure the achievement of program objectives and targets. Timely and well-thought-out action supported by appropriate information is a necessary part of any successful family planning program.

Taking corrective action is a responsibility of the various program managers, and each manager should be expected to fulfill this task. Corrective actions should be taken by the lowest-level manager with the information and authority necessary to make the appropriate decision. Decision making should be as decentralized as possible.

All actions should be well documented, so that one can evaluate in the future whether the best course was taken. Each new action or program should be based on experience to date and lessons learned.

The investment in a family planning monitoring and evaluation system will be useless if the information generated is not used. However, managers are often reluctant to take decisive action in highly visible large-scale national programs unless they are certain of the success of their actions. While an information system can support such decisions, it cannot push managers to take the final step and commit themselves to a course of action.

One method that may help in this effort is to have managers write scenarios for possible outcomes of difficult decisions to help them choose among alternatives. They must also understand that taking no action is itself a choice, and that its outcome must be compared to that of other choices.

NEXT STEPS

The next steps for the DPO activity monitoring system will be for NCPD (Mr. Ettyang and Mr. Chepsiror) to review the feedback from the DPOs prior to the quarterly monitoring visit in February 1992. FPMD, together with NCPD's senior Managers and Project Officers, will develop a set of DPO specific activity codes for the activity monitoring system. It is expected that these will comprise both administrative and project related activities. From this list of activities, indicators for each DPO will be selected, some that will be common to all DPOs and others that will be DPO specific. (A sample of the DPO activity preparation and budget monitoring forms are shown in Appendix III). It is anticipated that once the general list of activities is agreed upon some minor modifications will be made to the software to accommodate any reporting changes. These will be made during the next quarterly monitoring visit in February 1992.

One of the problems currently facing the NCPD Project Officers is the allocation of their time between research projects and project management activities, including MIS implementation activities. The major implication of this has been a slower than anticipated implementation of the MIS. When implemented, the systems will facilitate reporting and allow the project officers to focus more of their attention on analysis, project planning-development and research. However, until the systems are operationalized, the Project Officers will continue to spend an excessive amount of time responding to ad-hoc requests from senior managers and donors for information that would be readily available from the information systems. FPMD strongly emphasizes that unless sufficient time is spent on the implementation and utilization issues, the status quo will remain and the MIS is likely to remain a collection of interesting computer programs but not particularly useful for program management.

During the next monitoring visit to Kenya (February 1992), FPMD will conduct a Senior Management Seminar with NCPD's Acting Director, Ms. Margaret Chemengich and the Head of the Finance and Administration department, Mr. K. Chepsiror. The purpose of this seminar is to review the current status of the management information systems. In addition, the seminar will focus on the remaining activities in the implementation plan, and concentrate on the NCPD activities that are necessary for the successful implementation of the MIS. During the monitoring visit, Ms. Chemengich, Mr. Chepsiror, and FPMD will jointly facilitate a two day workshop for the NCPD Project Officers. The purpose of this workshop is to finalize aspects of the MIS work at NCPD. One of the key sessions during this workshop will be presentation by Ms. Chemengich and Mr. Chepsiror, of the output from the senior management seminar regarding the roles and responsibilities of individual Project Officers in the remaining implementation activities. In February, FPMD will also assist NCPD in instituting a performance planning and staff appraisal system for senior staff members. It is felt that this will greatly facilitate the management of MIS implementation and maintenance activities.

APPENDIX I

Entering Commitments; Screen 1.1.1

Once the correct password has been entered, the user is asked to enter the head code (NCPD's code is 341) and the correct line item code e.g. 000 for personal emoluments. When both code number have been entered, the system will display the line item description and request the user to confirm [Y/N] if the correct line item had been selected. If an affirmative answer [Y] is given, screen 1.1.1 (shown below) will appear giving the user a chance to enter the transaction.

<u>VOTE BOOK ENTRIES</u>	
C O M M I T M E N T S	
Entering Details for	NCPD Head 341
Item code Description	TRANSPORT OPERATING EXP.
DATE.....	17/12/90
SUPPLIER.....	Alfa Motors
ORDER REFERENCE.....	123456
COMMITMENT NUMBER....	12
COST.....	10000.00
TOTAL COMMITMENT.....	121,120.00

Do You Want To SAVE This Entry (Y/N) Y

The user is then prompted for the following information:

DATE: Current system date will be displayed as a default which the user can change with the day, month and year.

SUPPLIER: Name of the supplier providing the goods or services.

ORDER REFERENCE: A number which refers to the order.

COMMITMENT NUMBER: Each time an amount is committed in the votebook it is given a consecutive number. It is only possible for there to be one commitment number per line item code in use at any one time. It may not be used until the following financial year.

COST: The total amount should be entered in Kenya shillings. Once this amount has been entered the 'TOTAL COMMITMENT' field will change to reflect the addition.

After the cost amount has been entered the user is prompted whether or not he/she would like to save the entry that has just been made. If the reply is no the details are not saved and the user is returned to the previous menu. If the default [Y] is entered the information is saved as a record and the user is prompted for a new line item number. It is also for the user at this point to return to the commitment menu by entering [Q] and pressing <RETURN>.

APPENDIX II

NATIONAL COUNCIL FOR POPULATION AND DEVELOPMENTMonthly Consolidated Expenditure Budget Comparison Report as at 30 November 1991

HEAD	ITEM	TITLE	ACTUAL EXPENDITURE	COMMITMENTS TO DATE	EXPENDITURE +COMMITMENTS	BALANCE TO DATE	APPROVED BUDGET	TOTAL A/C	BUDGET BALANCE
341	000	PERSONAL EMOLUMENTS	0	0	0	0	20,000,000	0	20,000,000
341	024	MR NO. AP 201714 OF 24/12/90	0	0	0	0	20,000,000	0	20,000,000
341	040	GRATUITY AND PENSIONS	0	0	0	0	20,000,000	0	20,000,000
341	050	HOUSE ALLOWANCE	0	0	0	0	20,000,000	0	20,000,000
341	060	OTHER PERSONAL ALLOWANCES	0	0	0	0	20,000,000	0	20,000,000
341	080	PASSAGE AND LEAVE EXPENSES	9,724	0	9,724	72,545	20,000,000	32,270	19,967,730
341	100	TRANSPORT OPERATING EXP.	168,071	108,905	276,977	23,022	20,000,000	300,000	19,700,000
341	110	TRAVEL AND ACCOMMODATION	376,430	23,050	399,480	402,519	20,000,000	300,000	19,698,000
341	120	POSTAL & TELEGRAM EXP.	9,255	0	9,255	4,244	20,000,000	13,500	19,986,500
341	121	TELEPHONE EXPENSES	141,857	0	141,857	38,143	20,000,000	130,000	19,860,000
341	130	OFFICIAL ENTERTAINMENT	3,891	1,100	9,991	4,008	20,000,000	4,000	19,996,000
341	131	BOARD, COMMITTEE & CONFERENCES	16,000	0	16,000	184,000	20,000,000	200,000	19,800,000
341	172	PURCHASE OF UNIFORMS & CLOTHINGS	980	21,900	22,780	48,220	20,000,000	70,000	19,929,000
341	174	STATIONERY & PRINTING	186,755	58,025	244,780	5,220	20,000,000	150,000	19,850,000
341	175	ADVERTISING & PUBLICITY	262,600	0	262,600	122,710	20,000,000	385,310	19,614,690
341	182	PAYMENT OF RENTS & RATES	189,940	0	189,940	210,060	20,000,000	400,000	19,600,000
341	184	CONTRACTED PROFESSIONAL SERVICES	969,445	0	969,445	30,554	20,000,000	1,000,000	19,600,000
341	185	PLANN. EVAL. POLICY & MONITORING	142,400	0	142,400	3,857,600	20,000,000	4,000,000	16,000,000
341	190	MISCELLANEOUS -OTHER CHARGES	16,411	10,000	26,411	3,588	20,000,000	30,000	19,970,000
341	210	PURCHASE OF ADDITIONAL VEHICLES	0	0	0	2,000,000	20,000,000	2,000,000	18,000,000
341	220	PURCHASE OF PLANTS & EQUIP.	0	206,300	206,300	33,700	20,000,000	240,000	19,760,000
341	250	MAINT. OF PLANTS, MACHINERY & EQUIP.	48,341	0	48,341	71,659	20,000,000	120,000	19,880,000
341	290	STAFF TRAINING & SEMINARS	12,800	0	12,800	374,090	20,000,000	386,890	19,610,000
341	291	I.R.H AND POP. ACTIVITIES POP. II	0	0	0	5,000,000	20,000,000	5,000,000	15,000,000
341	340	GRANTS TO PRIVATE ORGANIZATION	0	0	0	0	20,000,000	0	20,000,000
341	341	OTHER MINISTRIES POP. ACTIVITIES	0	600,000	600,000	400,000	20,000,000	1,000,000	19,000,000
341	342	COMMUNITY BASED DISTRIBUTION	10,013,966	0	10,013,966	4,986,033	20,000,000	15,000,000	5,000,000
341	344	MASS MEDIA CAMPAIGN	0	0	0	0	20,000,000	0	20,000,000
341	345	COUNTRY PROGRAMME FOR POP. ALT.	137,723	12,000	149,723	2,419,036	20,000,000	2,568,760	17,431,240
341	348	POPULATION DEVELOPMENT ACTIVITIES	249,283	2,500,000	2,749,283	-2,733,083	20,000,000	16,200	19,983,800
341	349	POPULATION III (A) REVENUE 20%	5,659,387	4,250,000	9,909,387	55,612	20,000,000	9,965,000	10,035,000
341	350	GRANTS IN POPULATION PROGRAMME	0	0	0	0	20,000,000	0	20,000,000
341	351	FAMILY PLANNING SERVICE & SUPPORT	0	0	0	0	20,000,000	0	20,000,000
341	352	THIRD POP. PROJECT (UK)	15,071,211	0	15,071,211	1,728,788	20,000,000	16,800,000	3,200,000
341	353	POPULATION EDUCATION PROMOTION (TA)	0	0	0	6,110,000	20,000,000	6,110,000	13,890,000
341	354	FOURTH POPULATION PROJECT	12,073,688	0	12,073,688	4,926,311	20,000,000	17,000,000	3,000,000
341	405	CONSTRUCTION OF BUILDINGS	0	0	0	7,000,000	20,000,000	7,000,000	13,000,000
341	406	PF CLINICS (KAJAJIDO, KISII, BARINGO)	0	0	0	4,000,000	20,000,000	4,000,000	16,000,000
341	901	DIRECT PAYMENTS USAID	0	0	0	0	20,000,000	0	20,000,000
341	903	DIRECT PAYMENTS - UNFPA	0	0	0	0	20,000,000	0	20,000,000
341	905	DIRECT PAYMENT FPPI	0	0	0	0	20,000,000	0	20,000,000
341	906	DIRECT PAYMENTS FPPI	0	0	0	0	20,000,000	0	20,000,000
341	907	DIRECT PAYMENT - JAPAN	0	0	0	0	20,000,000	0	20,000,000
341	951	DIRECT PAYMENT IDA	0	0	0	0	20,000,000	0	20,000,000
341	953	DIRECT PAYMENT IDA	0	0	0	0	20,000,000	0	20,000,000

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APPENDIX III

DPO ACTIVITY MONITORING PREPARATION FORM

AREA CODE: _____ Page 1

DATE: _____

DPO NAME:	Annual Total	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4
CODE Activity Description					
200 Training:					
209 Training of Trainers (NOT own staff) No.:					
210 Training of Counsellors (NOT own staff) No.:					
211 Other Training of Health Staff (NOT own staff) No.:					
300 Dessimination; Seminars, Workshops etc.					
301 No. of Seminars held					
Total No. of Days					
Total No. of Participants					
302 No. of Workshops planned					
Total No. of Days					
Total No. of Participants					
303 No. of Training Courses planned					
Total No. of Days					
Total No. of Participants					
304 No. of Presentations planned					
Total No. of Participants					
305 No. of Rallies planned					
Total No. of Participants					
306 No. of Group Discussion planned					
Total No. of Participants					
307 No. of Orientation/Meetings planned					
Total No. of Participants					
308 No. of Film Shows planned					
Total No. of Participants					
309 No. of Radio Broadcasts planned					
310 No. of TV Broadcasts planned					
311 No. of Plays planned					
Total No. of Participants					
312 No. of Fairs planned					
350 District Population Comm. Meet. (No.)					
351 No. of Barazas Planned					
420 Distribution of Material					
421 Distribution of Calendars (No.)					
422 Distribution of Posters (No.)					
423 Distribution of Brochures (No.)					
450 Supervision/Monitoring					
451 NGO Project site Visits					
Total No. of Days					
500 Purchase of Vehicles, Equipment and Plant					
501 Purchase of Vehicles, # =					
502 Purchase of Computers, # =					
503 Purchase of Printers, # =					
504 Purchase of Photocopiers, # =					
505 Other Purchases; Desc.					

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NATIONAL COUNCIL FOR POPULATION AND DEVELOPMENT
DPO MONTHLY REPORTING FORM

DISTRICT: _____ MONTH: / / (D/M/Yr)
 Date Prepared: / / (D/M/Yr) DPO: _____

line Item Code	line Item Description	Annual Allocation KSHs	Expenditure This Month KSHs	Cummulative Expenditure KSHs	Balance KSHs
1	0	Personal Emoluments			
2	40	Gratuity and Pensions			
3	50	House Allowance			
4	60	Other Personal Allowances			
5	80	Passage and Leave Expenses			
6	100	Transport Operating Expenses			
7	110	Travel and Accomodation			
8	120	Postal and Telegram Expenses			
9	121	Telephone Expenses			
10	130	Official Entertainment			
11	131	Board, Committees & Conferences			
12	172	Purchase of Uniforms and Clothings			
13	174	Stationary and Printing			
14	175	Advertising and Publicity			
15	182	Payments of Reats and Rates			
16	184	Contracted Professional Services			
17	185	Plann., Eval. Policy and Monitoring			
18	190	Miscellaneous - Other Charges			
19	210	Purchase of Additional Vehicles			
20	220	Purchase of Plant and Equipment			
21	250	Maint. of Plants, Machinery & Equip.			
22	290	Staff Training and Seminars			
23					
24					
25					
26					
27					
28					
TOTAL					

27