Family Planning Manager

Management Strategies for Improving Family Planning Service Delivery

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Using Maps to Improve Services

Editors' Note

The experience of community-based family planning programs in Indonesia and Bangladesh, demonstrates that simple geographical maps can serve as useful information tools in helping family planning workers or volunteers to understand their community and its contraceptive needs. Family planning workers can use the information shown on a map to plan information, education, and communication (IE&C) activities, to distribute contraceptives more efficiently, and to improve the quality of the service statistics they keep. Supervisors can use the maps to monitor the fieldworkers' performance, to maintain up-to-date information about contraceptive trends in the community, and to involve both volunteers and residents in the management of the family planning program.

This issue of *The Family Planning Manager* describes how fieldworkers, community workers, or volunteers can prepare and use maps to improve management and decision making in community-based family planning programs. In Indonesia and Bangladesh, fieldworkers and volunteers have developed a special type of map called an ELCO map, which shows where the **EL**igible **CO**uples (married couples of reproductive age) live and what method of contraception they use.

ELCO mapping requires obtaining personal information from couples about their reproductive lives, so in some parts of the world, cultural norms of individual and family privacy might limit its use. Nevertheless, in many societies, in which fieldworkers have gained the trust and respect of their neighbors, the information needed to create an ELCO map can be obtained without compromising the confidentiality of the client.

The Guest Editors for this issue are Abu Sayeed, Program Director of the Family Planning Management Development (FPMD) project in Bangladesh, and Mohammed Ali Bhuiyan, Senior Program Officer, FPMD/Bangladesh. Mr. Sayeed and Mr. Bhuiyan have special expertise in helping community representatives to participate more fully in the management of local family planning services. The information presented in this issue is based on an FPMD/Bangladesh adaptation of an ELCO mapping manual that was originally produced by the Indonesian National Family Planning Coordinating Board (BKKBN).

—The Editors

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The Family Planning Manager (ISSN 1060-9172) is published bimonthly by Family Planning Management Development (FPMD), a project of Management Sciences for Health in collaboration with The Centre for Development and Population Activities (CEDPA).

Recommended citation: Management Sciences for Health. "Using Maps to Improve Service Delivery." The Manager (Boston), vol. 1, no. 5 (1992): pp. 1-16.

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FPMD is supported by the U.S. Agency for International Development under Project No. DPE 3055-C-00-0051-00. This publication does not represent official statements of policy by the U.S. Agency for International Development.

Family Planning Management Development Management Sciences for Health 400 Centre Street Newton, Massachusetts 02158, U.S.A.

Using Maps to Improve Planning and Decision Making

Maps are among the earliest tools used to gather, analyze, and present information. A map, whether it is large or small, is a condensed and selective picture of a particular environment showing how the various elements of that environment are related to one another. Maps of varying kinds are widely used in geography, environmental studies, astronomy, and epidemiology, and are also commonly used for management purposes. When used as part of an overall planning process, maps can provide insight into such decisions as the most appropriate location for a new health facility. When used for work planning, maps can help volunteers to identify the most efficient route to follow when making their household visits, particularly if the volunteers are not residents of the community. Maps can help supervisors to monitor the effectiveness of a work plan, and they make it easier to revise a work plan. When maps are used as part of an evaluation process, they can help supervisors assess the achievements or weaknesses of a program.

For family planning managers and their staff, maps can provide a simple and accurate snapshot of the family planning situation in a given community. The type of information that is shown on a map:

- is readily available and easy to understand;
- can help fieldworkers and volunteers to manage their caseload;
- can be quickly and easily updated to reflect changes in the reproductive and contraceptive status of community members;
- is important for assessing program performance and effectiveness and for analyzing trends in contraceptive practice;
- can be used by fieldworkers to organize their activities and to help them extend services to the maximum number of clients.

Increasingly, family planning programs depend on fieldworkers or volunteers to reach large numbers of the population, especially those living in remote rural areas or parts of the country without a good network of health care. Such community-based providers need accurate information that can be presented in a simple way. Information presented in a chart or map is likely to be easier for the fieldworker to understand than similar data organized into a table or written report. Maps can also be quickly updated to reflect changing contraceptive practices that the fieldworker must be familiar with in order to serve the people in his or her community effectively.

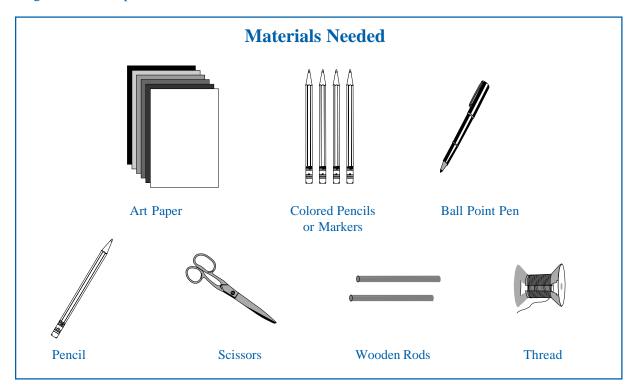
Maps can be especially powerful tools for family planning programs that depend heavily on community involvement. In Indonesia, for example, maps are used to help volunteers to identify the married couples in their community who are using a contraceptive method, where those users live, the type of method they are using, any broad changes in contraceptive practice over time, the pregnancy status of women in the community, and the number of children under five in each family.

With access to up-to-date information of this kind, community-based family planning fieldworkers can make decisions about such matters as:

- which couples are in need of a home visit;
- the reason for a home visit (to resupply or to motivate a client);
- special arrangements for clients who might need more extensive counseling about family planning or referral to other health care sites;
- clients who might be ready to learn about more long-term contraceptive methods.

The process of creating a map helps family planning managers and fieldworkers to better understand how the family planning program works in their community. Updating a map allows managers to continually refresh their knowledge about the family planning program.

Family planning program supervisors in Indonesia, Bangladesh, and Colombia use maps to obtain a picture of how well volunteers and fieldworkers are performing, to find out about trends in the acceptance or discontinuance of various methods, to identify couples resisting family planning, and to motivate women to use maternal and child health services.



Mapping Family Planning Services: The ELCO Map

In Bangladesh, community-based family planning fieldworkers use a map called an ELCO map to show where each of their clients live and the type of contraceptive method they are currently using. The map is also used to keep track of each couple's reproductive status and any changes in the contraceptive method they use.

An ELCO map is a graphic representation of the location of married couples in the community who are eligible for, or potential users of, family planning services. Data from ELCO maps can provide a wide range of information about the family planning status of residents of a community:

- the couple's contraceptive and general reproductive status;
- identification of couples who tend to change their contraceptive method frequently;
- the number of users for each type of contraceptive method;
- the number of pregnancies in the community.

The detailed information provided by the maps is important for planning, monitoring, and supervising the performance of the individual service provider and of the program as a whole.

Getting the Information You Need to Make an ELCO Map

Before you can prepare a map, you must decide what information you want the map to contain. The preparation of a map is a simple task once the basic family planning data have been collected.

First, you must develop a standard definition of an **EL**igible **CO**uple. Although the definition varies, in most cases eligible couple means a married couple in which the wife is between 15 and 49 years of age and

is capable of childbearing. Whatever definition you decide to use, the map should include only those people who fit your definition. To collect this kind of data, volunteers or fieldworkers who are responsible for providing family planning services in the community are trained to conduct a simple household survey (also called a baseline survey). By means of a brief interview with the woman or couple of reproductive age in each household, the fieldworker can obtain information about the couple's contraceptive use and reproductive health history.

How to ...

Prepare a Household Survey

In general, the steps to be followed in carrying out a household survey for an ELCO map are as follows:

- 1. Determine the area to be covered by the ELCO map. If the community or area covered by the map contains fewer than 75 households, this task can be done quickly.
- 2. Choose one household where an eligible couple lives as a starting point. Give the couple in this household the number 1. This is their ELCO number, and they will retain this number in all future record-keeping, even if they subsequently move to another household in the community.
- 3. Give the number 2 to the eligible couple living in the household nearest to the first one, the number 3 to the next couple, and so on, until all the eligible couples have been numbered.
- 4. Make a separate information card or an entry in a register designed by your program for recording personal information on the ELCOs in the community. The information card (or register) is important because it will give more specific information than is noted on the map, such as the number of children born to the couple or dates of method changes. Mark the couple's ELCO number on the card (or register). While interviewing the couple, collect the following information:

- The husband's name and occupation;
- The wife's name and occupation;
- The contraceptive method they currently use (any methods used in the past, and if they are not using a method, possible reasons for not using contraception);
- Whether or not the woman is pregnant;
- Whether or not she has just given birth;
- Whether or not she is breastfeeding;
- The number of children born to the couple.

When conducting a household (baseline) survey, remember that the information is very personal and that even though you assure couples of confidentiality, some of them will not be willing to discuss these matters. Some women may not want their relatives to know that they are using a contraceptive method. In programs that gather information about married and unmarried women of reproductive age, unmarried women who are sexually active may be in need of services but may not want other members of the household to know about it. In such cases, arranging to meet at a location outside the home may be necessary. For these same reasons it is important to consider, for each community, who is the best person to conduct the survey. This person could be someone from the same community, someone from outside the community, a volunteer, or a nurse.

Other Uses of Survey Data

The survey data that you have collected and recorded on cards or on a community register can be summarized and made available in a separate reporting form for each community or area. The summary information should include the:

- total number of eligible couples in the area covered by the map;
- number using any type of modern contraceptive method;
- number of couples using each different method;
- number of couples not using any contraceptive method, with the reasons for non-use if known:
- number of women who are currently pregnant;
- contraceptive prevalence for the area.

To calculate contraceptive prevalence for the area covered by an ELCO map, take the total number of eligible couples who are using any modern method of contraception, and divide this number by the total number of eligible couples represented on the map. For example, if the total number of ELCOs is 50, and the total number of couples using a modern method of contraception

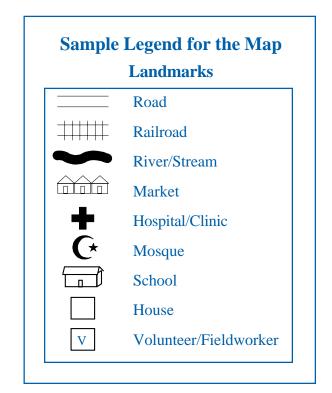
The fieldworker or volunteer should keep one copy of the summarized data for her own records and send another copy to her supervisor. A new community survey should be carried out periodically, and a revised summary should be made each time a new survey is completed.

is 10, divide 10 by 50 to get .20 or 20 percent.

Developing Symbols and Colors for an ELCO Map

Once you have the necessary information from the survey, you are ready to prepare an ELCO map. First you will have to decide on the symbols you will use to represent various features and landmarks in your area, and the colors you will use to indicate each

possible contraceptive or reproductive status of a couple. Map makers usually place examples of these symbols and colors, with an accompanying explanation, inside a small box at the bottom of a map. This is called the legend (or key), and it helps readers to understand the information contained in the map. It is a good idea to have every family planning worker in a program use the same colors and symbols, so that it is easy to compare the performance of each of the various services within that program.



Your choice of symbols and colors to represent the different landmarks, contraceptive methods, and categories of reproductive status will depend on the materials available in your community. You can use colored pencils, crayons, colored stickers, or draw appropriate symbols. The sample ELCO map shown in this issue uses commonly used, easy-to-draw symbols to represent geographical landmarks. Different colored circles on the map represent the various contraceptive methods used in the community. The symbols are only examples; you can, of course, choose your own that are appropriate to your particular setting. Colors can also be used to indicate pregnant women, women who have recently given birth, and breastfeeding women. Once the legend is complete, you are ready to draw the map, using the data that you have collected.

Using the Map to Record Survey and Geographic Data

A typical ELCO map illustrates the following general features of a community or locality:

- The location of all households in the community inhabited by a couple of child-bearing age. In the sample map in this issue, each household is indicated by a small square. If there are two eligible couples living in one household, make two connected squares, one for each couple, and give each square (thus each couple) a separate number.
- The major landmarks in the community, such as roads, rivers, lakes, schools, health centers, markets, churches, temples, and mosques. This type of landmark can help to identify how households are distributed in the community, and might reveal certain sub-groupings of households. Each landmark is indicated by a different type of symbol. In the sample map, which is appropriate for Bangladesh, the familiar symbol for a Muslim mosque is used. The symbol would be changed for different cultures and different religious faiths.
- The most direct or efficient route for the fieldworker to take to ensure that all clients receive a regular visit. The pathway is marked by arrows going from one household to the next.
- The home of the fieldworker if the worker lives in the community. On the sample map a special symbol denoting the volunteer's house (a square with a V in it) is used. The pathway marking his or her route generally starts and ends at his or her house.

The map also contains information about the following aspects of the *family planning environment*:

- The home of every married couple of childbearing age in the community, that is, every eligible couple. The number assigned to each eligible couple is written inside the square that represents the household where the couple lives.
- The reproductive status of the woman in the household (for example, whether she is pregnant, wanting to become pregnant, postpartum, or breastfeeding). Each of these conditions is shown by a colored circle that is drawn around the numbered square that indicates an eligible couple.
- The current contraceptive status of each eligible couple. *Each contraceptive method is identified by the use of a different color.*
- Changes in the contraceptive method used by each eligible couple. Every time a couple changes the type of contraceptive method they use, a colored circle is added, representing the new contraceptive.
- Eligible couples who are not using a contraceptive method. These couples are also identified by a different colored circle that represents non-users.

Updating the ELCO Map

The main geographic landmarks on a map are not likely to change very much over time, but the contraceptive methods and family planning status of each couple may change frequently. This information, therefore, may have to be updated during a fieldworker's visit. Similarly, information will need to be updated on the information cards (or ELCO register). Necessary updates will include:

• Addition of new households or eligible couples, or changes in an eligible couple's location in the community. The number of ELCOs will change, as people leave or move within (or outside of) the community, as young people marry and form a new eligible couple, or as couples no longer need family planning as a result of death, aging, or divorce. Whenever a new ELCO is identified, add a household (a new

square) to the map and give the couple a new number. Remember that the number refers to the couple and not to their place of residence. When a couple moves to another house in the community, their ELCO number needs to be moved on the map to show their new location. If a new couple moves into the community, a new ELCO number should be assigned to that couple.

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How to ...

Prepare an ELCO Map

ELCO maps should be small enough for the fieldworker to be able to carry, but large enough to show the necessary information clearly. A reasonable size would be 36 cm by 50 cm. It should contain only relevant and required information to avoid overcrowding symbols, colors, and other items on the map, and the items should be large enough to be easily readable.

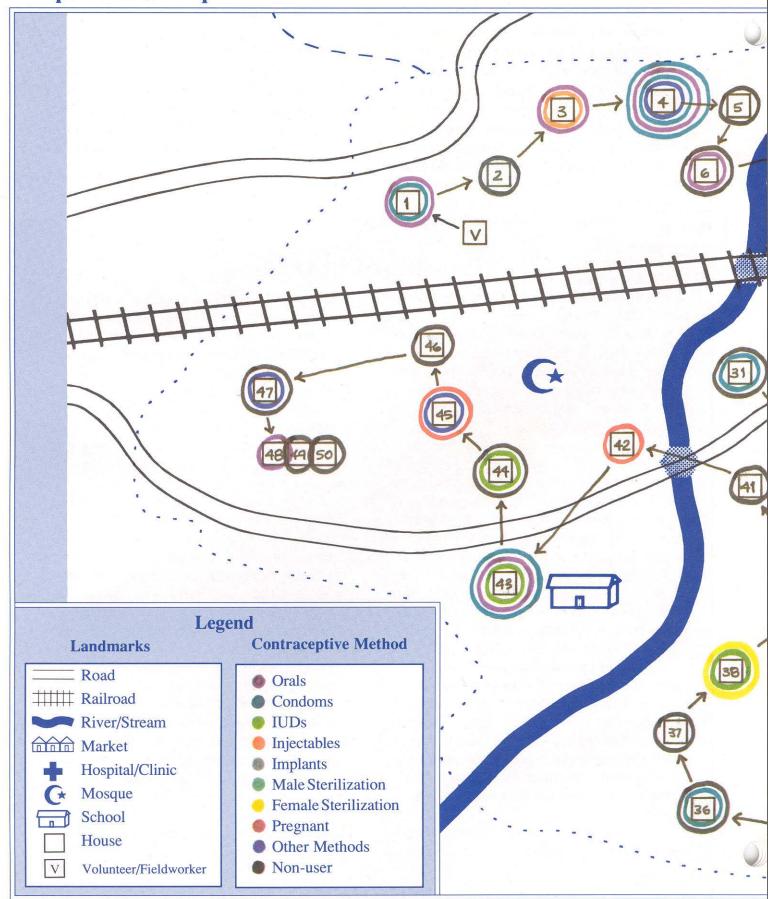
Because there is a limitation on its size, an ELCO map should not cover too large an area, and the number of eligible couples represented on any map should not exceed 75. If the fieldworker serves more than 75 couples, she or he may need to draw more than one map. Here are some general instructions on preparing a map:

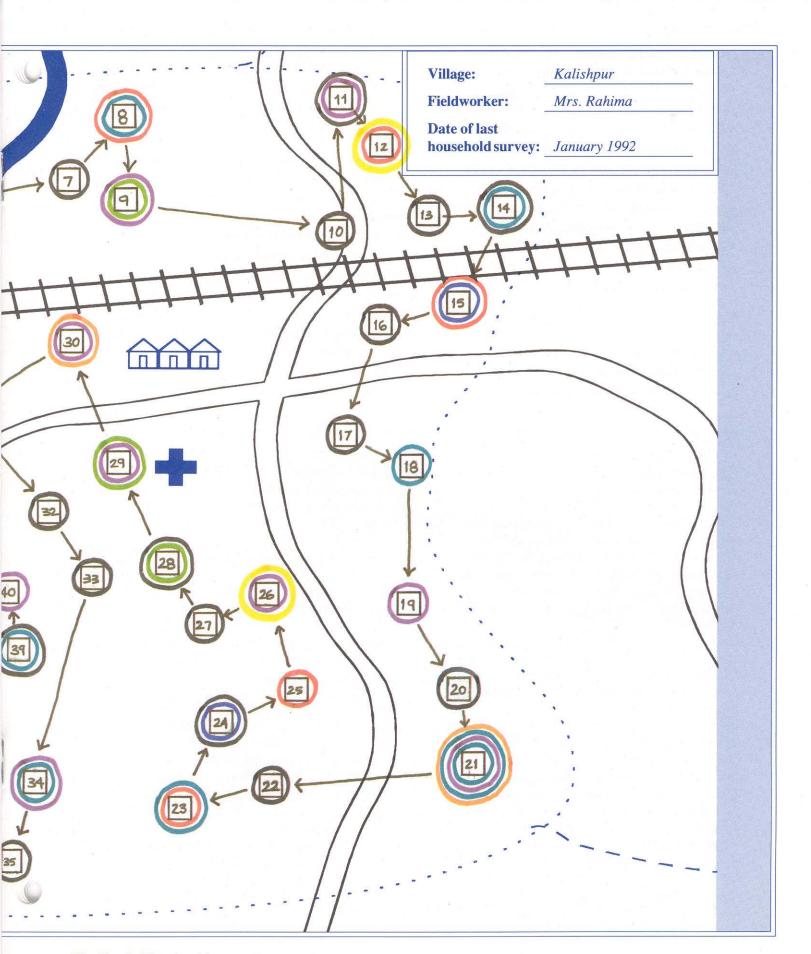
- 1. Take a large sheet of paper about 36 cm by 50 cm. On the top of the paper, write the name of the program, the name of the fieldworker who covers the area, the name of the area or community, and the date of the last survey.
- 2. Draw the general shape of the area in the lower three-quarters of the sheet of paper. Put in the major features or landmarks in the area, such as roads, rivers, schools, health centers, mosques, temples, churches, market places, canals, bridges, or other appropriate and recognizable landmarks. On the bottom of the sheet, make a box for the legend (or key) to explain the meaning of the symbols.
- 3. Show where each household with an eligible couple is located by drawing a square at that point

on the map. Number each square in sequence, making sure that the ELCO number on the map corresponds to the number assigned to that couple on the information card that you have prepared.

- 4. Show the contraceptive method that each eligible couple currently uses by drawing a circle around the numbered square that represents the couple's house. Each contraceptive or reproductive status should be represented by a specific color. The legend in the box should explain the meaning of each color.
- 5. Draw a square marking the location of the fieldworker's (or volunteer's) house if he or she lives in the community, and put a "V" inside the square. Using arrows, mark the quickest route that the fieldworker can take to go from one household to another. The routes or paths that you mark do not have to be completely accurate, but they should give a general idea of how the fieldworker or volunteer could best organize his or her visits to ensure that each household is visited regularly (for example, once every 4-6 weeks).
- 6. When the ELCO map is completed, attach it to a thin stick or wooden rod, using glue, tape, or thread, so that the volunteer can roll it up when she goes on her round of visits. Then, using a needle and thread, attach a loop to the top of the map, so that the volunteer can hang it in her house, or from a tree or wall, when she is showing it to her supervisor, or to the managers of other programs providing services in her community.

Sample ELCO Map





continued from page 7

- Changes in the contraceptive method used by each couple. Whenever the couple changes contraceptive methods, draw a new circle of the appropriate color around the outside of the previous circle. In this way, the last color will always signify the most recent contraceptive method used by that couple. If you are using colored stickers, update the map by placing a new sticker on top, and slightly to the side, of the old one. Then update the information on the ELCO register. Since the map does not indicate when a couple started using a method or when a couple changed methods, always write the dates in the register.
- Changes in the reproductive status of each couple. Whenever an ELCO is no longer in need of contraception, add a

colored circle to show the new status of that couple. For example, if a woman becomes pregnant, gives birth, begins or stops breastfeeding, or if the eligible couple is not currently practicing any method of family planning.

When a map is routinely updated, it provides both fieldworkers and their supervisors with a rapid review of the changes in contraceptive use in a given community or area. It indicates trends in the use of the various contraceptive methods and helps to identify discontinuers who may be in need of special motivation. It also shows if contraceptives are effective in helping couples avert unwanted births. To keep abreast of changes of this type, some fieldworkers in Bangladesh draw a new map every year, or whenever they conduct a new household survey.

Working Solutions—Colombia

The use of maps stands behind Colombia's success in family planning. Beginning in the early 1970s, the "Walking Women" in Colombia have been using maps to facilitate the delivery of family planning services and improve maternal and child health in rural areas. The so called "Walking Women" are Rural Health Promoters under the State Health Department in Armenia, Central Colombia. The Health Promoters work in areas where doctors can only visit once or twice a month. In addition to providing Oral Rehydration Salts to children with diarrhea, promoting breast feeding, and improving environmental sanitation, they promote family planning and provide new contraceptive supplies to women who are using oral contraceptives or condoms.

Maps were a powerful tool that the Health Promoters used to effectively identify and target services to the women and children who were the most in need of primary health care and reproductive health services. Keeping track of how many women the Health Promoters had to visit was difficult because they worked in rural communities with populations often greater than 100 people. To assist the promoters in their day-to-day work, the Maternal and Child Health (MCH) program decided to teach these women to draw and use maps. The use of maps

has played an important role in improving contraceptive prevalence. Between 1970 and 1990 the contraceptive prevalence in rural areas increased from 10 to 59 percent.

After taking a quick census in the community where they work, the Health Promoters draw maps that show the health needs of individual families in their community. Equipped with these maps and a bag full of basic medicines and contraceptives, the Health Promoters are then able to provide improved services to their communities as well as to improve their own efficiency. For example, they can determine ahead of time how many pregnant women may need iron and vitamin supplements, or how many children may need immunizations, or how many couples need a new supply of pills or condoms.

Maps have also made life easier for the supervisor whose role is to reinforce health education, and to support the Promoter in areas where the Promotor has met resistance to immunization and family planning services. Using the maps, the supervisor can tell, for example, where non-contraceptors or children who have not been immunized are located. With this information, supervisors can better target appropriate interventions and provide special attention to groups or individuals who are most in need of services.

Using Maps to Improve Service Delivery

Maps can help family planning managers to improve service delivery in a wide variety of ways. The maps can help them to plan their work, to improve client services, to manage volunteer activities, to strengthen record-keeping, and to improve supervision and program performance.

Using Maps for Work Planning

Both preparing and consulting a map can help family planning managers and fieldworkers to:

- plan and organize their work;
- provide information for setting targets;
- monitor progress towards meeting those targets.

Supervisors will find that maps can help them to:

- divide up the work among different fieldworkers;
- plan program activities.

Community outreach workers will find that maps provide an excellent way for them to plan their itinerary and daily schedule of household visits.

Using Maps to Improve Client Services

Fieldworkers can improve client services by:

- Attending to the needs of potential clients and of those who discontinue use of a method. Clients who have never used a contraceptive method, who are resistant to family planning, or who have stopped using a method (discontinuers) can be identified, and special motivational activities can be developed for these groups.
- Reducing frequent method switching or discontinuation. Fieldworkers or volunteers who know the location of clients who are unhappy with their contraceptive method can better plan their household

visits to these couples. The fieldworker will then be able to plan for the extra time needed to answer a couple's questions, to discuss their concerns, to describe other methods, or to refer the man or woman to a health center to obtain other contraceptive or reproductive services.

- Identifying clients who may be candidates for long-term clinical methods.

 When fieldworkers know the contraceptive history of couples, they will be able to identify clients who might accept more long-term clinical methods and can refer them to a clinic for these services.
- Providing effective maternal and child health (MCH) referral. Fieldworkers who know which women in the community are pregnant or have recently given birth can plan activities to refer these clients to an MCH center to ensure safe deliveries, and to obtain appropriate primary health care and child survival interventions.

Using Maps to Manage Volunteer Activities

Preparing and using a map can be the cornerstone for initiating and training new family planning volunteers. Maps are effective tools for managing volunteer activity because they:

- are easy to prepare and use;
- do not place too great a record-keeping burden on volunteers;
- help volunteers and fieldworkers to gain a better understanding of the community program, and so they are likely to feel a stronger sense of motivation in their work, and develop a long-term commitment to the program;
- encourage stronger community support for the program and for the work of the volunteers by educating managers of other service programs in the community about the work of the volunteers.

The Mexican Federation of Private Health and Community Development Associations (FEMAP) is a private non-profit institution that was established in 1973. It's 44 affiliate members cover 95 cities and thousands of rural communities throughout Mexico. Assisted by over 9,000 volunteer community outreach workers who are supported in their outreach work by health and social science professionals, FEMAP serves 400,000 continuing clients and 70,000 new clients each year. Eighty-five percent of FEMAP clients are served by community workers and 15% by clinic staff. FEMAP's community work is based on active and informed volunteer involvement in the community and is rooted in the belief that people have the potential to overcome their difficulties.

In its search for efficiency and quality of care, FEMAP developed the first community family planning service in Mexico. Each CBD program is staffed by one social worker who supervises 8 outreach worker coordinators who in turn supervise 180 outreach workers who serve up to 3,200 clients.

In 1975 FEMAP began house-by-house mapping of clients in each of the neighborhoods where the community family planning program was being implemented. FEMAP modeled their mapping campaign after a strategy developed by local health authorities to cover communities

during national vaccination campaigns. The mapping exercise had three basic objectives:

- to publicize the program;
- to find potential clients;
- to recruit new acceptors.

In 1985 the mapping strategy was modified and expanded to incorporate the following elements:

- preparing a map as the initial activity for family planning work in the community;
- making home visits to potential clients by outreach workers;
- updating the map every year;
- using students from schools of social work in the community mapping process;
- providing mapping results to community outreach workers.

Mapping has proven to be an extremely valuable management technique for FEMAP and has contributed to increasing project productivity, expanding coverage, reducing start-up costs, and strengthening community operations and program efficiency. Because of this success, variations of FEMAP mapping techniques have been used with some modifications by the rest of FEMAP associates.

Using Maps to Improve Record-Keeping

As part of a wider reporting system, information from a map about the contraceptive and reproductive status of individual couples should be used to update the information maintained by supervisors in registers and on other forms.

- By using a common numbering system for the maps and registers, the supervisor can easily update her register after every supervisory visit.
- Maps covering small communities often contain information of very high quality. By using these maps as a data source, managers can improve the accuracy, completeness, and timeliness of regular program performance reports.

Using Maps to Improve Supervision and Program Performance

Supervisors can improve supervision and program performance by:

- Verifying the accuracy of program data and monitoring service quality. Program supervisors who know the location of all the contraceptive users in a given community, as well as their contraceptive and family planning status, can more easily monitor service quality and verify the accuracy of the data in the registers. The supervisor can occasionally make a random check of households, in order to confirm that the reported data about the couples living there are accurate. This might be a satisfactory substitute for carrying out an entire new household survey.
- Identifying specific performance objectives for the service provider. Supervisors who understand the overall family planning situation in their community can develop

- and set realistic performance objectives for the fieldworker.
- Planning program activities. Since maps facilitate understanding family planning trends and individual client histories in a community can address the special characteristics and needs of that community.
- Estimating contraceptive supply needs.
 A better understanding of trends in contraceptive preferences can help managers make more realistic estimates of future contraceptive needs in a given community.
- Identifying potential service delivery problems. Managers who understand patterns of contraceptive method-switching are more likely to be able to detect commonly experienced problems with a particular method, or inadequacies in client education, and they can then target IE&C programs more effectively.
- Dividing overall target groups into smaller, more manageable units. When fieldworkers in a family planning program are responsible for hundreds of clients, the use of maps can help them to divide their target group into smaller, more manageable, area units. Each area unit can then be treated independently, and the service provider can organize her activities to meet the contraceptive needs of that particular area.
- Developing clinic outreach activities. A clinic-based program can use maps to manage outreach activities. The map can be a useful tool for planning, developing strategy, implementing an outreach program, and monitoring the results. The map can show where different services are needed, will reduce time searching for clients with similar needs, and keep track of movements of clients.

Reviewers' Corner

A forum for discussing additional applications of FPM concepts and techniques

On mapping other groups in need of reproductive services . . . Several reviewers stress the need to change the definition of eligible couple to include other family planning target groups. For example, in some countries, it may be more useful to map all men and women who are sexually active and of reproductive age, whether or not they are married. One reviewer writes, "ELCO mapping should be used to target more groups than just married women Particularly in low income communities where there are sizeable numbers of sexually active men and women who are not married. These groups need to be identified and targeted for contraceptive and reproductive health services."

On the cultural acceptability of conducting a household survey . . . One reviewer suggests, "In addition to problems relating to cultural acceptability, program managers will have to decide about the political feasibility of conducting a household survey. It is possible that authorization from local authorities may be needed for such a purpose. The fieldworker may need to be accompanied by someone who is known to the community."

On using maps for serving adolescents . . . One reviewer advises, "I felt while reading this issue that mapping would be a good method for targeting teenagers as a subgroup of the 'women in reproductive years.' We have started a program to provide contraceptives to teens and we have had difficulty getting them to come in to use the center. This method could help us to define the problem and perhaps provide us with some solutions for serving this group better. It would also allow us to get some needed information about the sexually active adolescents, such as the extent to which contraception is being used and which methods, whether they have adequate access to contraception, and the incidence of pregnancy."

On assigning eligible couple numbers where several maps represent a single program... Several reviewers suggest, "It is important to develop a careful system of assigning numbers in a program so that a supervisor can distinguish between the ELCOs of one community and the ELCOs of another when looking at the register or information cards. For example, if there are several maps for one family planning program it is easier if one community has numbers beginning with A and another community has numbers beginning with B and so forth. This way when there are two ELCOs with the number 33 (one numbered A33 and the other B33) the supervisor will know to which community the ELCO belongs."

On using maps to target other clients in the community... Several reviewers point out, "To get the full benefit from conducting a household survey and developing a map, managers should consider mapping information about other important health needs, for example, the immunization status of children under 5 years old. A map with this information would be helpful in locating children who need immunization services."

On ways that maps might be used . . . Several reveiwers indicated that program managers, district managers, CBD workers, and family planning volunteers could all benefit from developing and using maps. One reviewer writes, "Mapping will fit into our program very well. It seems like an excellent way for volunteers to become involved in the program and become more supportive of our family planning activities."

Maintaining Maps as a Management Tool

Like any tool, once a map has been introduced it must be used and updated regularly in order for it to continue to be valuable and useful. In countries such as Indonesia, Bangladesh, and Colombia, maps have been key to the success of the community distribution component of the national family planning program. By using maps, fieldworkers, volunteers, and health promoters develop the abilities and skills they need to collect reliable information about contraceptive use, and to use this information to better serve their clients. In order for a map to remain a useful tool, both supervisors and fieldworkers must work together to ensure the following conditions:

Commitment: All staff members must be committed to collecting and using simple and reliable information.

Regular updating: Maps should be updated regularly to ensure that the information is complete, accurate, and timely.

Consistency: Colors, symbols, and numbering should be the same from one map to the next, and should be consistent with other records used in the program.

Use of information: Information from the map should be used to update registers and other reporting forms. This process also serves to demonstrate the value placed on the map.

Verification: The data on the map should be verified by the supervisor, and appropriate feedback and approval should then be communicated to the fieldworker or volunteer.

Decision-making: Local-level planning decisions, strategy development, and performance supervision should be based on information from the map. ■

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Checklist for Using Maps to Improve Services

-	For Fieldworkers				
	Conduct a household survey to collect data for your map and assign a number to all ELCOs in the area.				
	Assemble your map-making materials.				
	Draw major landmarks and the location of ELCO households in the community on an appropriately sized sheet of paper.				
	Mark the ELCO numbers on the map in the square that signifies each ELCO's house.				
	Draw circles to identify the contraceptive method or reproductive status of each eligible couple.				
	Mark arrows to show the best route for household visits.				
	Update maps regularly.				
	In collaboration with your supervisor, develop methods to analyze and use the information on the maps.				
1	For Supervisors				
	Develop a plan for introducing maps into the community-based family planning program.				
	Provide guidelines for making maps and for using the data acquired from them: determine the area to be covered, the information to be collected, the symbols and legends to use, and a method of summarizing the data in a useful format.				
	Train fieldworkers to prepare and use maps.				
	Support the use of maps by fieldworkers, and help them to use information from the maps to improve their performance.				
	Analyze and use information from maps to make service delivery improvements.				
]	For Mid- and Senior-level Managers				
	Identify areas within existing programs where maps can be used to improve and support service activities (i.e., CBD, community outreach, or IE&C programs).				
	Identify ways in which maps can improve and support service activities.				
	Decide what data should be collected and mapped.				
	Implement activities that use the maps to strengthen the delivery of family planning services.				
The Family Planning Manager is designed to help managers develop and support the delivery of high-quality family planning services. The editors welcome any comments, queries, or requests for free subscriptions. Please send to:					
	The Family Planning Manager Family Planning Management Development Management Sciences for Health 400 Centre Street Newton, Massachusetts 02158, U.S.A. Phone number: (617) 527-9202 Fax number: (617) 965-2208 Telex: 4990154 MSHUI The FPMD project is funded by the U.S. Agency for International Development. This project provides management				

Pamily Planning Manager

CASE SCENARIOS FOR TRAINING AND GROUP DISCUSSION

Mrs. Rahima's Village: A New Look at Family Planning in Kalishpur

Mrs. Rahima rolled up the eligible couple (ELCO) map for the area she served. She was a community-based distribution (CBD) family planning worker, and had just visited the last of the clients in her village of Kalishpur and had resupplied them with the contraceptive method they were using. Now she had up-to-date information on the contraceptive methods being used by the eligible couples in her area, and on some of the changes in family planning status that had occurred since her last visit. As she headed toward her home across the railroad tracks, Mrs. Rahima reminded herself that now she should update the map of her area, and have the revised version ready to show her supervisor, who was due to visit her the following day.

Although Mrs. Rahima had been using the map for almost a year, she had only recently been trained to use the map for analyzing trends in her community. The director of the family planning program had decided that more accurate data on contraceptive prevalence and method mix in the community was needed, and all CBD workers had recently been trained to use the ELCO maps to analyze various aspects of contraceptive practices within the community.

The next morning when her supervisor Mrs. Salina arrived, the map was already spread out on Mrs. Rahima's table. Mrs. Rahima had finished updating the map showing the current contraceptive method being used by each couple, those couples

who had switched methods, those who were pregnant, those who had discontinued family planning, and those who had never used any form of contraception. "Good morning, Mrs. Salina," said Mrs. Rahima. "Can I offer you some tea?"

"Thank you. That would be very nice," said Mrs. Salina.

"I have just updated my map," said Mrs. Rahima. "Why don't you have a seat while I prepare the tea. We can discuss the changes in a moment."

Mrs. Salina examined the map closely and noted the changes in her register.

"Well, Mrs. Rahima, you have done a very good job in updating your map," said Mrs. Salina. "Did you have any difficulty collecting the information?"

"No, it has always been quite easy," responded Mrs. Rahima, "although this time there were several houses that I had to visit more than once because no one was at home. However, I found that with the map it was easy to plan the quickest route to visit those houses again. Even with the changes since my last visit, the map makes it quite clear that condoms and pills are still the most popular methods in my area."

"It certainly looks that way," said Mrs. Salina.
"Now let's get a piece of paper and look at the actual numbers. We need to let the program director know the contraceptive prevalence and the method mix for your area. Later I will combine your figures with others from the region."

Case Discussion Questions on reverse side

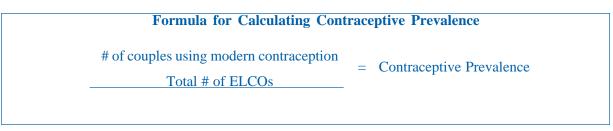
Case Discussion Questions: Mrs. Rahima's Village

To answer the following questions, please refer to the ELCO map on pages 8 and 9 of this issue of The Family Planning Manager.

- 1) What percentage of the eligible couples in Mrs. Rahima's village are using a modern method of contraception (oral contraceptives, condoms, IUDs, injectables, implants, or sterilization)?
- 2) What is the modern method mix in Mrs. Rahima's village? What actions might she take to increase the percentage of couples using longer-term methods?
- 3) Which couples appear to have been dissatisfied with the contraceptive method they were using? What should Mrs. Rahima do about this situation?
- 4) List five other ways in which Mrs. Rahima might use the map.

Case Analysis: Mrs. Rahima's Village

1) What percentage of the eligible couples in Mrs. Rahima's village are using a modern method of contraception (oral contraceptives, condoms, IUDs, injectables, implants, or sterilization)?



Looking at the map, Mrs. Rahima can count the total number of couples using a modern method of contraception. This number is 17. The total number of ELCOs on the map is 50. Mrs. Rahima can calculate the percentage of couples using a contraceptive method by dividing 17 by 50, to get 0.34, or 34 percent. This measure, the proportion of eligible couples who are using a modern method of contraception, represents the contraceptive prevalence in her service area.

2) What is the modern method mix in Mrs. Rahima's village? What actions might she take to increase the percentage of couples using longer-term methods?

Mrs. Rahima's first step in calculating the method-mix was to make a table showing the number of couples using each contraceptive method. From that table, shown on the next page, the percentage distribution of the contraceptive methods was calculated by dividing the number of couples using each method by the total number of couples using any method (in this case 17 couples).

Using the data from this table, Mrs. Rahima could now draw a pie chart or a bar chart that would graphi-

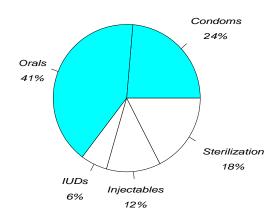
Case Analysis: Mrs. Rahima's Village

Number and Percent of Couples Using Each Method Kalishpur, November 1992

Contraceptive Method	Number of Couples	Percent distribution of Contraceptive Methods Used
Orals	7	7/17 = 41%
Condoms	4	4/17 = 23%
IUDs	1	1/17 = 6%
Injectables	2	2/17 = 12%
Implants	0	0%
Sterilization	3	3/17 = 18%
Totals:	17	100%

cally illustrate the relative proportion of each of the contraceptive methods that her clients are using. See the supplement to *The Family Planning Manager*, May/June 1992, "Guide to Graphing Data and Taking Action," for a reminder on how to draw a pie or bar chart.

Method Mix (modern): Kalishpur November 1992



Looking at the pie chart she has drawn, Mrs. Rahima can see that the majority of the couples in her village are using pills or condoms. Mrs. Rahima might compare this method mix with the method mix found in other nearby villages or areas, to see whether other means have been more successful in motivating clients to use more effective methods. This way she can see whether the situation in her community is unique, or common to the entire program. She could also ask her supervisor to provide her with more educational materials on longer-term methods and ask her supervisor to accompany her on one of her rounds of visits to make sure that she is providing complete and up-to-date information on the longer-term clinical methods.

Case Analysis: Mrs. Rahima's Village

3) Which couples appear to have been dissatisfied with the contraceptive method they were using? What should Mrs. Rahima do about this situation?

The map shows that 10 couples in her area have stopped practicing family planning and three couples have switched methods quite frequently. Using this information, Mrs. Rahima should try to find out why this has happened. She might discover, for example, that some women were experiencing side effects from the method they were using, or that there were negative rumors about certain methods going around the village, or that the husband or another family member had objected to the woman's use of a certain method. With this additional information, Mrs. Rahima can plan household visits that will be long enough to give her time to correct the rumors, reassure some users about the safety of the method they are using, answer the questions of others, and generally discuss any problems or concerns the couple is experiencing.

4) List five other ways in which Mrs. Rahima might use the map.

Mrs. Rahima might use the map to:

- Identify couples who have never practiced family planning and find out the reasons why. Looking at the map, Mrs. Rahima can see that 18 couples have never used contraception but are not pregnant. First, she should find out which of them are not using a contraceptive method because they want to have a baby, or because they believe that the husband or wife is infertile. Mrs. Rahima should then consider the remaining couples as potential new acceptors of family planning, and devise a strategy to gain their interest, for example by explaining the health advantages for the woman and her children to be gained from spacing births and from limiting unplanned pregnancies.
- **Keep track of the women in the community who are pregnant.** Knowing this, Mrs. Rahima can help the women obtain adequate prenatal care and care during labor and delivery. She can then arrange for the new mother to receive post-natal care for herself and her baby.
- **Provide support and reassurance to couples who have chosen sterilization.** Mrs. Rahima can continue, on occasion, to visit couples who have chosen sterilization, to reassure them of their decision and answer any questions that they may have. She might also inquire as to whether these couples might be willing to discuss their decision with other couples who are contemplating sterilization.
- **Set performance targets.** Knowing the CPR for her village allows Mrs. Rahima and her supervisor to set realistic targets for the number of new acceptors she might expect to be able to recruit in her area over a certain time period.
- Schedule her time. Mrs. Rahima can use the map to plan and schedule her time effectively, so that none of the couples in her area are left without the contraceptive supplies they need, and none of the potential users go without a home visit.