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EVALUATION OF POPULATION INFORMATION PROGRAM

by

Nicholas H. Wright, M.D., M.P.H. (Team Leader)
William Barrows, M.S.
Eileen M. Lavine, M.S.

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GLOSSARY

AID	Agency for International Development
BKKBN	Indonesian National Family Planning Program
CPC	Carolina Population Center (at University of North Carolina)
CPFH	Center for Population and Family Health (at Columbia University)
ESCAP	Economic and Social Commission for Asia and the Pacific
FOG	Index used as readability formula (see SMOG)
FPIA	Family Planning International Assistance
IEC	Information, Education, and Communication
INTRAH	Program for International Training in Health
IPPF	International Planned Parenthood Federation
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
JHU	The Johns Hopkins University
LDC	Less Developed Country
MCH	Maternal and Child Health
MEDLARS	Medical Literature Analysis and Retrieval System
MEDLINE	Medical Information On-line (set of files in MEDLARS)
MOH	Ministry of Health
NICHHD	National Institute of Child Health and Human Development
NLM	National Library of Medicine
PCC	Population Crisis Committee
PCS	Population Communication Service
PI	Population Index (at Princeton University)
PIP	Population Information Program
PPD	Population Projects Database (part of PIP)
SMOG	A grading formula used to predict reading grade level required of average reader to understand written materials; tests are usually based on count of polysyllabic words.
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund
WHO	World Health Organization

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The persons interviewed by the evaluation team are listed in the Appendix. All were candid and forthcoming in their comments, which served as a useful framework for this assessment.

The International Science and Technology Institute undertook overall responsibility for the evaluation, and we acknowledge the able assistance of John McWilliam, Director, Population Technical Assistance Project; Rhonda Steppe, and Deborah McClaren.

I. INTRODUCTION

I.1 Background

The Population Information Program (PIP) operated under the aegis of the Hopkins Population Center at The Johns Hopkins University (JHU), has been providing important technology transfer and information dissemination efforts to less developed countries (LDCs) since it began in 1972 at George Washington University, continuing from 1978 at JHU. Contracts with the Agency for International Development (AID) have supported the project, with the current three-year contract DPE-3032-C-00-4076-00 terminating August 31, 1987.

The contract calls for an in-depth external evaluation of PIP to assess program objectives, program costs, and impact on users. An evaluation has already been made of the Population Projects Database/-Management Information System component of the project (PPD). This evaluation focuses on the other two outputs:

1. Population Reports - five/six issues per year in English, French, Spanish, Portuguese, with occasional issues in bahasa Indonesia, Arabic and Turkish, sent to an international mailing list of about 93,000 addresses;

2. POPLINE - storage, analysis, and distribution of bibliographic information, with special reports and ad hoc responses based on the computerized information database.

I.2 Scope of Work

The principal purpose of this evaluation was to respond to specific assessment questions put by AID and to make recommendations that could be helpful in determining the shape and size of PIP activities for the next phase of the contract. Specific questions to be addressed were posed by AID and are presented as introductions to the Findings and Observations sections of each Chapter.

I.3 Team Composition

Members of the evaluation team were:

Nicholas H. Wright, M.D., M.P.H., Associate Professor (Epidemiology), Department of Environmental and Community Medicine, UMDNJ-Robert Wood Johnson Medical School, Busch Campus, Piscataway, NJ, Team Leader;

William Barrows, M.S., Information Coordinator, Family Health International, Research Triangle Park, NC;

Eileen M. Lavine, M.S., President, Information Services, Inc., Bethesda, MD.

I.A Methodology

The evaluation team initiated its assignment on December 17, 1986, with a day of interviews with AID staff, including discussions with the Director and Associate Director, Office of Population; Chief, Information and Training Division; regional Health and Population officials and/or desk officers, and the Research Division. Following this, the team met with PIP staff in Baltimore for two days, reviewing documents and interviewing individuals. After a period reserved for studying AID and PIP documents and interviews of selected outside persons, including members of the Editorial Advisory Committee and others who have been involved with various parts of the project, the team met again in Baltimore for in-depth interviews and analyses.

The team reviewed its preliminary findings and observations in overseeing an evaluation meeting on February 11, 1987 with selected AID officials. The team then consolidated these observations with recommendations, presented them to PIP and AID in oral debriefings on March 4 and 5, and on the basis of these discussions, completed the final draft of this report.

II. GENERAL PROJECT

II.1 Overall Evaluation

Are the important assumptions upon which the project is based still valid?

This long-standing activity is founded on the primary assumption that a current, comprehensive, technical, and reliable information base is required to guide AID developmental activity in the population and family planning area. Further, by transferring this information to policy makers and service providers in Less Developed Countries (LDCs), policy decisions, program management, and service delivery will be improved, and more effective, safer fertility control technologies will reach target populations quickly and acceptably.

The PIP project reflects one of the focal points in AID's 1982 policy paper, "Population Assistance:" dissemination of information and education on family planning and population both for individual users and also for government policy makers. The project also strongly supports efforts to strengthen the capacity of local institutions, both public and private, to deliver appropriate family planning services.

The long-term nature of AID's commitment to these principles was expressed clearly in the 1984 ~~proposal~~ ^{proposal} to fund PIP for 10 additional years, ~~later scaled back to the current three-year period.~~ Accurate, up-to-date information must be seen as a continuing cost of doing developmental business, for AID's guidance as well as that of the developing countries it serves. Documenting massive social change - and fertility control behavior is a unique example - is important in understanding economic development generally.

The conclusion is that the assumptions underlying this project are as valid in 1987 as they were 15 years ago when the PIP activity began. This is a dynamic field. Good ideas spring up constantly, are always valuable, and will continue to need responsible dissemination.

II.2 Projected Future Needs

What is the value of such a project and projected future needs for this type of activity?

AID funding has created an excellent Population Information Program. Performance and morale are high at both Population Reports and POPLINE, although POPLINE is less visible (and less understood). PIP has successfully served widely differing constituencies both within AID, and without in the developing world. Outside observers in and outside the United States uniformly rate Population Reports highly and see a continued need for the publication.

While the exact value of quality information is elusive of measurement, it is perhaps best appreciated when it is lacking. A continuing long-term need exists for both Population Reports and POPLINE, possibly with increased outputs and services to meet LDC and population professionals' needs even better. Recommendations for utilizing both products more effectively within current budget restraints are presented in the Sections III and IV.

II.3 Potential Reductions

What are the team's recommendations for project workscope and contract implementation if funding is reduced significantly?

PIP is utilizing current resources efficiently, on the whole, and is alert to cost-cutting possibilities and economies of scale. In the event of severe budget cuts, some downsizing is possible and could be compatible with continued excellence. Potential cost savings of up to 20-25 percent, and their implications, are reviewed more thoroughly in Sections III (Population Reports) and IV (POPLINE), but are suggested broadly here.

II.3.1 General

While this project thrives best in a university setting, it is arguable whether it represents primarily research, as it is now classified for purposes of determining the indirect cost overhead rate, or technical assistance. The project does not carry out basic research, but rather transmits findings of others' research to provide technical assistance to LDCs. Some reconsideration should be given to lowering the overhead rate to reflect this predominantly technical assistance function of the project. This could represent a reduction of about \$300,000 in the annual budget expense for the PIP as a whole, or 12 percent of the total budget (including PPD).

II.3.2 Population Reports

Although persistent effort has already achieved substantial cost savings in producing Population Reports (summarized later), further reductions may be possible. These include:

- o Reduction to 24-32 pages, by cutting down on reference citations and placing the bulk on request, and simplifying or abridging text;
- o A concerted, one-time attempt to purge the mailing list, which would entail immediate costs now but some savings later;
- o Encouraging LDCs to translate issues independently;
- o Exploring, and where feasible adopting, new technologies such as computer translations and desk top publishing.

Potential ways to secure additional funds outside the Office of

Population would also result in cost savings. They include:

- o Seeking buy-ins from AID regional bureaus for most translations;
- o Seeking a buy-in from the Office of Health for one issue per year, especially appropriate in view of recent coverage of health issues by Population Reports;
- o Instituting a subscription charge of \$20-30 per year for all recipients in developed countries.

II.3.3 POPLINE

Reductions for POPLINE that could cut expenditures include:

- o Dropping or reducing subcontracts with Population Index at Princeton and Carolina Population Center's Population Bibliography;
- o Eliminating some nonpublished material,
- o Using author abstracts and not modifying annotations,
- o Dropping POPLINE Previews and not revising or reprinting Thesaurus or promotional brochure,
- o Eliminating exhibitions and demonstrations on-line away from Johns Hopkins University.

Potential ways to secure additional revenues for POPLINE include:

- o Increasing charges for searches and documents to US and developed country agencies (except AID).
- o Seeking outside support for pilot projects to test new technologies such as CD-ROM in selected LDCs and user-friendly software, which could expand LDC use.

II.4 Conclusion

The implications of these proposals are reviewed later. Tastes will differ, but the team believes that these suggested changes are compatible with the continued excellence and usefulness of the project in guiding policy and program activity in the population and fertility control field.

III. POPULATION REPORTS

III.1 Description

Population Reports are the highly visible product of the Population Information Program. They are unique serial publications, carefully researched, clearly written and illustrated, and highly authoritative in content. They provide a combination of biomedical, social, economic, and programmatic information not available elsewhere in one place. There is probably no other resource for obtaining this kind of data easily; it would be virtually impossible in less developed countries.

With a possible total readership of a quarter million - considering the pass-along copies - the Reports provide the foundation for policy decisions, community programming, scientific research, professional training, and service activities in developing countries - and in developed countries as well, at all levels. AID can be proud of the image it projects through these publications.

Population Reports perform a number of valuable functions that support AID population policy and programming in LDCs:

- o provide factual information
- o establish links with scientific and technical institutions
- o share family planning research findings and practices
- o contribute to policy development
- o promote private sector involvement and marketing techniques
- o provide reliable information for curricula and training materials
- o provide references for scientific research that can be accessed.
- o spark hypotheses for research protocols.
- o provide material to counsel clients to ensure informed consent.

Over the 15 years since the project began, content has broadened, in response to needs of AID and the field, from narrower attention to contraceptive methodology, sterilization, and family planning programs to broader health and social topics that affect population growth and stability. (See Appendix A for topic categories and numbers of issues within each group.)

III.2 Observations and Findings

The evaluation team presents below observations and findings in response to specific questions posed by AID. Recommendations following from these findings are given in Section III.3.

III.2.1 Role in Relation to Other Population Publications

What is the role of Population Reports in relation to other population publications? Which audiences among population professionals are served? What alternatives exist for serving the needs of the target

audiences?

Internal and external surveys list Population Reports as the most useful source of information among other population publications. Most other publications read by the target audiences cover research studies, news, or policy developments.

In an informal survey of 160 information, education, and communication (IEC) consultants in 1985, for example, 71 respondents or 92 percent of the group knew Population Reports out of a list of 28 publications in the population and communication fields and found it useful. This was the highest percentage of all publications listed. Next highest were FP Perspectives and International Family Planning Perspectives, each with 84 percent; Studies in Family Planning (83 percent); Population Studies (75 percent), and Population Bulletin (73 percent). Although not a scientific study, and carried out on JHU letterhead, this does show that consultants who work on AID-funded projects know Population Reports and find it useful.

Similarly, a 1984 survey by ESCAP of readers of Asia-Pacific Population News in ESCAP member countries asked respondents which of eight important population publications they read regularly. Population Reports was highest on the list, with 73.37 percent readership.

A survey of administrators who had participated in the Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) from 1979 to 1985 showed that Population Reports was the most popular of the educational materials received during the course, with 87 percent reporting that they had used them. More than half the respondents, 56 percent, would have preferred some of the materials to be translated into another language - but of these, only 27 percent asked to have Population Reports translated.

III.2.1.1 Audiences Served. Target audiences of Population Reports are primarily the following groups:

- o government program leaders and policy makers
- o physicians
- o health professionals
- o academicians
- o researchers
- o mass media communicators

III.2.1.2 Recipients. The mailing list as of December 6, 1986, shows the categories used for recipients, insofar as they are identifiable (the largest group - interested individuals - are those for whom no specific category fits). These categories are shown in Table I, with numbers of addresses in each category (number in parentheses shows addresses for the category in 1980).

Of the total, about 49,000 are medical plus 1,104 deans of medical or public health schools, and about 42,000 are nonmedical.

Most copies go singly, although about a third are sent in bulk. In addition to those sent to the mailing list, about 8,000 copies are distributed per month in response to special requests.

 Table III.2.1.2-1

MAILING LIST FOR POPULATION REPORTS BY CATEGORY OF RECIPIENT
 =====

<u>Category</u>	<u>'86 No.</u>	<u>'80 No.</u>
A - Family planning/population organizations (private)	- 6,034	(2,509)
B - Other population organizations (discontinued)	- 49	(2,977)
C - Commercial drug companies	- 646	(1,231)
D - U.S. Government	- 722	(849)
E - International, intergovernmental organizations	- 1,472	(1,204)
F - Foreign governments (LDC Ministries, etc.)	- 7,453	(5,414)
G - Religious affiliation	- 1,498	(1,883)
H - Hospital/Medical Facilities	- 22,042	(11,531)
I - Interested individuals (where no other group fits)	- 28,248	(19,346)
J - Journals, academic pubs., authors, IEC specialists	- 801	(1,084)
K - Academic (Universities, schools)	- 17,430	(20,457)
L - Libraries, Information/Resource Centers	- 4,471	(3,724)
M - Mass Media	- 1,415	(1,155)
N - Nursing/Midwife Schools	- 543	(0)
S - Students	- 758	(80)

 Geographically, 79,196 copies or 84.5 percent of the total go to LDCs, 14,507 to developed countries. This contrasts with 68.5 percent that went to LDCs in 1980, showing a dramatic increase in copies for LDCs and drop in quantity to developed countries. Area breakdowns are shown in Section III.4.

III.2.1.3 Alternatives. While there are other population publications, as noted above, most cover research studies, news, or policy developments. No other single publication takes a broad topic and covers it comprehensively and in depth. No satisfactory alternative exists to provide what the AID 1982 Policy Paper on Population Assistance describes as "dissemination of information and education on family planning and population, both for individual users and also for government policy makers," necessary to accompany provision of services.

III.2.2 Assessment

What is the team's assessment of Population Reports in relation to such factors as accuracy, completeness, readability, topic selection, length, format, and relevance for LDC target audiences, U.S. and other donor community users? Timeliness/cost of translations?

III.2.2.1 Accuracy and Completeness. Peer input and the review process are comprehensive, with manuscripts sent to the Advisory Committee, relevant people at AID, and other experts in the topic area. Some

tee, relevant people at AID, and other experts in the topic area. Some are asked to review the entire manuscript, others just selected sections. Reviewers may add newer data or references, criticize a statement as being too strong or too vague, offer different wording or organization. Occasionally, reviewers may suggest a shift in tone to guarantee reliability, use of latest research, sensitivity to country differences.

A master copy is made incorporating all suggested additions, changes, deletions, etc. If reviewers disagree, changes are discussed in house and if necessary, the writer or editor will contact reviewers to clarify a point. Careful attention is paid to assessments by reviewers, something that has been called rare in this field.

Extensive changes are made in the draft manuscript, and also in printed galleys and page proofs, as additional new information comes in, including occasional late comments from important reviewers, which necessitates author's alterations.

Comments received from reviewers and readers described the content as "covering new ground," "evaluates usefulness of studies rather than merely describing them," "well balanced," "well tailored to audience needs." There is no doubt on any front that the reports are accurate and complete.

III.2.2.2 Readability. Although some critics feel the reports are overly technical, most respondents to the PIP 1986 Survey approved of the content as it is; only 10 percent preferred that they be less technical, compared with 26 percent who said they should be more technical. More than 90 percent said the style and format make the Reports easy to read. (See Appendix B for a report on the Survey).

The SMOG readability test and the FOG index text (see Glossary) indicate that 1985 and 1986 issues are at a reading grade level of 13-15 years of education (the reading grade that a person must have reached to fully understand the text being assessed). Earlier issues in 1982-84 had higher levels - 15 and 16 - showing a definite effort to simplify the language in recent years. Readability tests measure only the structural difficulty (e.g., vocabulary, sentence structure and idea density), and not difficulty in concept, organization of material, content or reader characteristics. These tests are based on American readers, and presumably a number of readers in LDCs even with higher levels of education might find it difficult to comprehend some of the texts. Those who respond to surveys are more likely to be those who do understand more easily - or if they don't, they might hesitate to admit it.

On the whole, the reports currently are written in a clear and lucid style, with comparatively brief sentences, explaining fairly complicated terms in understandable language. The broader use of color boxes, subheads, graphics, and photos has greatly enhanced readability.

III.2.2.3 Topic Selection. The current PIP contract describes Population Reports as a serial publication covering contraceptive technol-

marriage and reproduction, the economic and social factors that affect fertility, and all aspects of family planning administration. Choice of topics is to be based on information needed in population and family planning programs, as well as on meeting special needs for information in health and nutrition.

These broad topic areas have allowed for a number of (peripheral topics, such as Operations Research, Immunization, Oral Rehydration Therapy, Social Marketing, Youth of the 1980s, and AIDS. This broadening from an earlier emphasis on Oral Contraception, Intrauterine Devices, and Sterilization has been at AID's request, and some of these topics have elicited strong favorable response as well as requests for bulk copies.

The 1986 Survey showed that readers and key persons preferred topics involving population and health-related topics more directly (i.e., Breast Feeding, Fertility and Family Planning; Infertility and Sexually Transmitted Diseases; Oral Contraceptives; Healthier Mothers and Children Through Family Planning; Oral Rehydration Therapy for Childhood Diarrhea).

However, the survey was not a representative sampling of readership, and the response rate was only 17 percent of those queried. Hence, this finding should not be used in isolation as support for selecting topics. Other topics may relate more directly to AID-sponsored programming and policy needs in LDCs.

III.2.2.3.1 Reprints and Revisions. In its earlier days, PIP issued two Worldwatch Institute reprints as part of the Family Planning Programs series (J11 and J13). Such reprints might be repeated in the future, taking an outside technical study and sending it with the PIP Population Reports logo. The contract offers an opportunity to do this. Possibly a technical review of contraceptive methods, epidemiologic reviews of safety issues, operational research studies of quality, etc., might be suitable for this purpose. Another option might be to include such a reprint with a shortened Report, to avoid the time and costs of a comprehensive study. It is recognized that extra fees or subcontracts may be required to reprint copyrighted material. These options should be explored on a case-by-case basis.

More recently, PIP has issued updated revisions of previous reports where a complete newly researched and written report was not deemed necessary. Oral Rehydration Therapy (1980) was updated and reissued with the same L2 classification in 1984; similarly, Breast-Feeding, Fertility and Family Planning (1981) was revised and reissued, again as J24, in 1984. So in 1984, PIP issued only four new reports, plus two that were essentially updated and revised versions of earlier studies.

III.2.2.4 Length. Most recent issues total 36-40 pages, with 5-9 pages of references, the latter often numbering as many as 600, with from 50-65 asterisked to indicate those of particular value in preparation of the issue. Although nearly all respondents in the 1986 readership survey said they liked the length of the reports, even knowledgeable people in the U.S. admit that they do not read the entire text but leaf through for

sections of particular interest.

Most reports could probably be cut without great loss of vital material, especially if the references are reduced. "Youth in the 80s" had 40 pages, of which 9 1/2 were references; "Operations Research" also had 40 pages, with 4 1/2 pages of references; "Fertility and Family Planning Surveys" had 56 pages, with nearly 9 pages of references (this did include a number of tables, and such a Report could be ruled out by a strict page limit). PIP believes some reduction in thoroughness would be inevitable, and that each issue would necessarily appeal to a narrower readership or be more superficial.

Because of the length of such issues, the back page listing of earlier issues available and a form for POPLINE search requests often do not appear, or where there is a listing of back issues, there is no coupon to facilitate an easy reply.

It is not clear whether eliminating such detailed lists of references would be a problem except to researchers in developed countries who have access to the documents cited and rely on the thoroughness of Population Reports bibliographies. PIP feels that the authoritativeness of the Reports would be diminished. Also, about 10-15 percent of document requests are probably taken from these references. One way to reduce the length of some issues would be to cite only those references now listed with an asterisk, with a boxed notice offering the complete list of references on request.

III.2.2.5 Format. Recent format improvements make Population Reports far more readable and attractive. These include:

- o Larger and darker type face for Editor's Summary, which is now limited to the front page
- o Larger and darker type face for body text
- o More bold subheads
- o Greater use of boxes with color rules
- o More line and bar graphs
- o More photos and drawings
- o Greater use of checklists, directions, "how to do it" boxes

III.2.2.6 Relevance. All indications are that Population Reports are right on target in terms of relevance for LDC target audiences, as well as for U.S. and other donor community users. They provide the only information many of these groups obtain systematically. But it is impossible to gauge the actual use made of the reports in LDCs by different groups of readers without on-site interviews or better reporting back by Population Officers.

III.2.2.7 Translations. The lag time for producing Population Reports in translation has been cut from 6-8 months to about 5-6 months. This covers the period after an issue is printed in English, allowing for translation, typesetting, printing and shipment. Translation, review, and proofreading are done out-of-house on a contract basis to reduce costs and

obtain native speakers' expertise, but this adds to the length of the translation process. With a new assistant editor on staff who has taken over responsibility for supervising translations, perhaps this lead time can be shortened further. It would certainly be desirable, because a few English copies of an issue usually do go to countries which then have to wait a long period to receive additional copies in their own language for wider use. Possibly the translator could start sooner on a manuscript, and further exploration could be made for suitable but faster translators.

Of the 110,000 copies of each issue printed, 70,000 are in English. Five issues a year are usually printed in the three principal languages: Spanish - 28,900; Portuguese - 19,100; French - 14,900. Average cost for these translations per issue, including the translators, typesetting, printing, envelopes, mailing, and postage comes to about \$62,000. Currently a study is underway on using the computer translation program, ENGSPAN, to prepare a rough translation into Spanish - which could cut the time and cost of the rough translation in half.

Two issues were to be printed in Bahasa Indonesia (10,000 copies) under a subcontract with the Indonesian National Family Planning Program (BKKBN), similar to an arrangement for three issues in 1982-85, but the contract was not signed until April 1986 and the first issue is not yet completed. Three issues in Arabic (10,000 copies), and three in Turkish (10,000 copies) were to be funded in 1986-87 through buy-ins from the Asia Near East Bureau of AID.

III.2.2.8. New Technology. Word processing staff at PIP now codes manuscript copy so that the typesetter does not have to re-keyboard the text, and only one proofreading is necessary. This saves about a week of time and 20 percent of per page typesetting costs. But new desktop publishing, which appears appropriate for this type of publication, may offer substantial savings of both money and time. It would be worthwhile to investigate this possibility.

III.2.3 Mailing Lists

How effective is the methodology for purging/expanding the PIP mailing lists? (Especially in regard to the number and kind of new recipients; identification of new channels which can be used to distribute Population Reports, and projected costs.)

III.2.3.1 Purging/Expanding Mailing List. The PIP mailing list is maintained by the JHU Computing Center and accessed on a remote terminal via telephone lines. All requests to be added to the list are checked against the current roster for duplication. Addresses of any reports returned undelivered are deleted or corrected. The problem with duplications appears to have been largely solved through such computerization and cross-checking of lists.

PIP has made a continuing effort to purge and purify the mailing list, with 86.5 percent of addresses added or corrected since 1980 and about one-fourth of the list updated in the past two years. The usual

to those who do not respond to the first mailing. In March 1986, for example, 10,652 letters were mailed to addresses on the list in India, with 3,274 or 30.7 percent returned within the next six months. A second letter was sent in September to nonrespondents, and those who still do not reply will be removed from the mailing list.

Mailing lists also have been sent to Population Officers for updating and correction. In another technique, PIP has proposed to the Director General of the Pakistan National Institute of Population Studies that NIPS send PIP's verification letters out locally and receive replies for transmission back to PIP. A similar arrangement was used to purify the Thailand mailing list.

The proportion and number of copies to developed countries has decreased from 28.7 percent (nearly 23,000) in 1980 to only about 15 percent (or about 14,000) in 1986. At the same time, in line with the emphasis of AID programming, both the proportion and number of copies to Africa have increased. Table III.2.3.1-1 shows the regional breakdown of addresses by number and percent for 1980 and 1986. Table III.2.3.1-2 shows LDCs with more than 1,000 addresses on the mailing list.

Table III.2.3.1-1

ADDRESSES OF POPULATION REPORTS RECIPIENTS BY REGION

<u>Region</u>	<u># Records '86</u>	<u>% '86</u>	<u># Records '80</u>	<u>% '80</u>
Africa (so. of Sahara)	14,778	15.8	8,260	10.5
West and North Africa	10,073	10.7	5,932	7.5
Asia	21,687	23.1	20,396	25.9
Latin America	33,101	35.3	21,586	27.4
North America(US,Canada)	9,312	9.9	14,955	19.0
Europe	4,752	5.1	7,636	9.7

Table III.2.3.1-2

LDC COUNTRIES WITH MORE THAN 1,000 ADDRESSES ON MAILING LIST

Brazil	10,808	Ghana	1,983	Nigeria	1,971
		Guatemala	1,183	Pakistan	1,182
Chile	1,462	India	10,723	Peru	1,593
Colombia	1,968	Indonesia	1,709	Philippines	1,336
Dominican Rep	1,413	Kenya	1,457	Thailand	1,033
Ecuador	1,027	Mexico	6,535	Tunisia	1,205
Egypt	3,423	Morocco	1,712		

 There does not appear to be any rationale determining these quantities per country. They clearly are not in proportion to the population and in fact, seem disproportionate in many instances. The quantity may be a function of the quality of available lists, or may reflect AID priority countries or especially active Population Officers. At the same time, increasing the quantity per se should not be controlling. The quality of persons receiving copies, in terms of positions of leadership and influence as well of passing along knowledge, should be the guiding factor.

III.2.3.2 New Recipients. PIP makes a concerted effort to obtain names of new recipients who meet the goals of the target audience. Names are submitted regularly, from attendees at workshops and conferences and from lists of population-related organizations and individuals. For example during the past two years, the following lists were submitted for checking against duplications and added to the roster: IPPF list (4000 names); PCS List Africa (400 names); PCS list South America (320); PCS list Asia (224); INTRA trainees (291); PCC list (470); MOH Guatemala list (222). The mailing list includes about 32,000 names added by the special request of the individual, and 19,000 who replied to a questionnaire request asking to be placed or kept on the list.

The mailing list has been criticized for not including enough key people, such as government officials, legislators, political leaders, and press. But these people are least likely to return form letters of verification and may be dropped as a result of a mailing list purge. It has also been suggested that the mailing list could be strengthened on the health side, with more maternal and child health names, and also to include more demographers.

Media names on the mailing list increased from about 500 in 1980 to nearly 2,000. The JHU press office sends out releases, usually written by PIP, on individual issues of the Reports, and often these are picked up by the press services. This helps promote PIP and those issues, primarily in developed countries. The press in LDCs receive the reports and occasionally write articles based on them. About 50 LDC journalists receive Reports and press releases by airmail at their request.

III.2.3.3 Economies of Production and Distribution. PIP has sought competitive bids for typesetting and printing to ensure lowest obtainable costs, and achieves unit savings by printing in large volume with one printer. The unit cost of one 32-page issue is \$.31 if 10,000 are printed, but only \$.16 for a 70,000 print run. Thus savings derived from reducing the number of copies printed in any language would not be great (\$3,100 for 10,000 compared with \$11,200 for 70,000).

PIP distributes all Reports initially by second-class mail. In the U.S., this means a nonprofit rate of less than \$.10 per copy. Overseas, the cost of second-class (surface) is \$.29 for a 32- or 36-page issue, compared with \$.96 for third-class mailing. Surface mail can take 6-8 weeks, but airmail rates would be prohibitive. To retain its economical

mailing rates, however, PIP must follow stringent postal regulations (mailing schedules, no enclosures of any kind, no separate publications or reprints, no advertising, and envelopes required). This may preclude otherwise desirable kinds of innovation in distribution. PIP does use a special bulk air printed matter rate when possibly to reply rapidly to requests for printed materials, which reduces those postal costs by about 50 percent.

III.2.3.4 New Channels of Distribution. PIP has explored possible new ways to distribute the Reports. The 1980 evaluation suggested mass airfreight shipments of preaddressed copies, to then be put into the mails for internal delivery. PIP did look into this possibility but found that while copies would arrive much sooner, costs would be significantly higher. Some copies are sent in bulk to one address for local distribution, but it is often harder to get a box through customs than individual mail. Another option considered was printing copies in LDCs, but costs appear to be much higher in many countries because paper is imported.

It is regrettable that surface mail is necessitated by cost limitations. The only possible alternative might be to send selected copies - to policy makers, key press, AID missions, for example - by air so that some immediate use could be made of the information.

III.2.4 Distribution Options

Are Population Reports being sent to appropriate groups (categories) of personnel? Should distribution be made selectively to groups according to need/interest by topic?

Efforts have been made to follow the 1980 recommendation that the mailing list names be categorized, with broader categories of interest that are largely mutually exclusive. From all the evidence, it appears that the Reports are being sent to appropriate categories of people (See Section III.2.1.2), although titles and specific designations are not always known. As part of the 1986 PIP survey, a sampling of names with titles such as Director or Chief was made separately; these apparent "key persons" responded in fairly similar terms to those of the general readership.

The largest single category is "interested individuals," and where possible more effort should be made to define these persons more clearly and place them into a more specific category.

Selective mailings might be made by topical subject matter, but this may not be desirable. Most of the topics cover a broad range of interests, with material for every level - research, medical and nonmedical service, training, programs, policy. The only way to be sure that the information reaches all target audiences is to send every copy to the entire mailing list. In PIP's 1986 survey, about 43 percent of respondents said they pass their copies along to other persons or to a library. Also, the broad coverage serves to acquaint readers at each level with the concerns and interests of other levels.

III.2.5. Editorial Advisory Committee

What is the team's assessment and recommendations regarding the PIP's Editorial Advisory Committee's purpose, composition, and utilization?

The Editorial Advisory Committee has a fairly broad representation: Johns Hopkins, Emory School of Medicine, NICHD, World Bank, Population Crisis Committee, International Advertising Association, and AID advisors. Although the Committee is supposed to meet once a year, there has not been a meeting since the Fall of 1985. Topics are already on the docket for the coming year, and it was thought best to wait until after the new contract is signed before meeting again.

The Committee provides a knowledgeable and balanced viewpoint for evaluating future topics, but even more important, members serve as expert reviewers for manuscripts bringing a variety of backgrounds and expertise to this review. Perhaps only a few members of the Committee should be used to review each manuscript, enough to give varied views but not so many as to necessitate much additional material or references or require great amounts of rewriting and editing.

The Committee might be invited to meet at this time to discuss the future of PIP and offer suggestions for scope of work and implementation if funding is reduced.

III.3. Recommendations

The following recommendations refer back to the specific findings and observations in III.2.

III.3.1 Accuracy and Completeness

If anything, the review process might be considered "overkill." It would seem that as useful a document can be produced with fewer reviewers and less effort to be completely current to the minute - something that is probably unachievable anyway.

It is recommended that fewer reviewers be used on manuscripts, with an effort made to see that this smaller group is representative of the field, in an effort to reduce the time and effort put into revisions.

III.3.2 Readability

Writers should keep a continual check on writing level, seeking shorter sentences with fewer polysyllabic words, shorter paragraphs with more bold subheadings.

A boxed outline might be included in each issue, indicating which sections of the Report would be helpful to (1) program managers, (2) educators or trainers, (3) researchers, (4) policy makers, so that readers

their efforts.

Consideration should be given to producing a 2-3 page popularized synopsis for legislators, top policy makers and the media who may not be interested in reading so many technical details. This could be done using the Editor's Summary plus additional details from the body, without too much extra work by the writer and editor. A notation could indicate that a complete report is available on request.

An experimental version might be produced for a forthcoming issue and sent to a selected sample of individuals with a letter asking whether the amount of material in that version was satisfactory for their purposes, and offering the complete report on request. Results could be noted after six months to see the degree of interest in the full report. AID population officers could also be asked to query recipients for their reaction to the shorter version. This process would reduce the number of copies of the full report printed and thus cut down printing and mailing expenses. The comparative costs of such an innovation should be reviewed, and if funds permit, it should be tested.

III.3.3 Topic Selection

The emphasis on health-related topics that affect population growth should continue. But stronger efforts should be made by PIP and the AID Office of Population for support from the AID Office of Health, the National Institute of Child Health and Human Development (Center for Population Research), the World Bank, UNICEF, and other health-oriented agencies.

Some topics on the list for future issues cover narrower subject areas and possibly could be produced in fewer pages (e.g. Program Record Systems, Logistics and Commodities Management, Financing FP Programs).

Consideration should be given in the future to using reprints of outside technical studies and/or revisions of earlier PIP Reports, if feasible.

III.3.4 Length

Length of individual Reports could be reduced judiciously, resulting in considerable savings in typesetting, printing and mailing. Maximum length of 24-32 pages should be achievable. One way to reduce length somewhat might be to print only the 50-65 references now designated with an asterisk (as explained in Section III.2.4) and offering the complete list on request. This alone could reduce an average 40-page issue to 32 pages. Another way to reduce the length would be to set a narrower focus for coverage of a topic.

Back pages of every issue should be reserved for listing of selected earlier issues, with a coupon clearly explaining how to request copies, and a description of POPLINE with a coupon to request a search and a simple explanation of how to do this.

III.3.5 Format

Serif type would improve legibility even further. The current type face, an Optima, is probably the best of the sans serif faces, but all recent studies show that the eye finds sans serif types difficult to read and that a complete paragraph of such type without an indent will repel the eye. For maximum readership, and especially where the reader is often reading a non-native language, a serif type (such as Times Roman or Century Oldstyle) with an indented first line of each paragraph could greatly assist legibility.

Without losing legibility, the leading between lines could be lessened from 12 points in the Editor's Summary to 11, and from 11 points in the body text to 10. With 10 and 9 point type in an open serif face as suggested above, one point of leading will be adequate and would save about 10 lines per page.

The contract called for including detachable center-spread material, but this has not been done consistently. Such material might include large illustrative or tabular matter, perhaps explanations of techniques or methods in fairly simple language and possibly in expanded type, and could be suitable for posting in a family planning clinic or training center for nonprofessionals.

III.3.6 Relevance

Under the next contract, an in-depth survey could be designed by outside survey experts, mailed by and returned to them, with direct questions asking how the Reports and POPLINE are used, what information they have adapted for their own programs or research, who else reads their copies, etc. Alternatively, surveys could be used by Population Officers and other AID officials and/or contractors, PCS staff, etc., to interview selected samples of recipients in LDCs. This would be a more realistic evaluation of actual use and practical applications of the Reports.

Readers should be invited to respond at other times. Perhaps a box in each issue could ask readers to send in reports of their research, programs, new policies, etc.

III.3.7 Translations

If LDCs want the material in the Reports badly enough, and many fertility control programs are now mature, they should be asked to pay themselves for translations. LDC organizations should be encouraged to do this. The Family Welfare Foundation in Delhi has just asked permission to publish information in Population Reports in Urdu and distributed free among Muslims in India. Or alternatively, if AID feels the foreign language versions are important enough for programmatic purposes, the regional bureaus should buy in for translations. The latter procedure would probably be more efficient, because it would permit continued use of experienced translators, under PIP editing, supervision and control, plus the economies of scale in quantity printing and second-class mailing.

Buy-ins should be sought for all translations - Spanish and Portuguese from the Latin American Bureau, French from Africa Bureau, as well as continued buy-ins for Indonesian, Turkish and Arabic translations from public or private family planning groups or AID missions. Another option for the Portuguese version would be to have translations done in Brazil. Immediate steps should be made to produce the Spanish translations by computer.

If the funding situation becomes extremely limiting, however, the Reports could be provided only in English, giving the opportunities for translation to the individual LDCs or other interested donor agencies.

III.3.8 New Technology

PIP staff should explore the potential of desktop publishing for producing future issues. For an initial investment in software and a laser printer, utilizing PIP's existing word processing equipment, and with a small amount of staff training, it may be possible to set the type and make up pages in house, including alterations at every stage, print final copy on the laser printer, and send that copy to an outside printer to reproduce in quantity. It is certainly worth exploring.

III.3.9 Mailing Lists

More effort should be made to ensure that copies of Reports are reaching key persons in governments, ministries, political groups, and press - not just by verification letters, but by obtaining lists from USIA, and other listings of top leaders in high priority countries. Emphasis should be on quality rather than quantity.

Efforts should be made to determine classifications of persons now categorized as "interested individuals" on the mailing list. All verification letters should give the PIP list of categories and request that respondents self-identify their category.

Printouts of country lists should be sent to AID Population Officers for verification, deletion and addition on an annual basis.

Closer collaboration with AID regional desk officers, USAID missions, in-country committees, World Bank, World Health Organization, UNFPA, UNICEF etc., would help see that recipients represent the best target audience.

III.3.10 Editorial Advisory Committee.

The Editorial Advisory Committee should be convened now to present additional outside views on the future scope of work and possible reductions if funding is cut.

III.4 Potential for Budget Reductions/Additional Revenues

Population Reports represent the information dissemination component

of the 1982 AID Population Policy, and as such should definitely continue to play an important role in carrying out that policy. If budgetary cuts require reduction in costs, there are some realistic options that can be explored. The estimated savings would not be additive, and some steps would require one-time expenditures, with savings in later years. Potential savings are presented below, followed by possible sources of additional funding that may be available.

III.4.1 Reductions in Scope (not additive)

- o Reduce the number of pages of each issue to 24 pages, cutting down on references,
- o Reduce number of issues per year from six to five or four substituting an outside technical reprint occasionally, if feasible,
- o Once each year, revise an earlier Report and update it as one of the Reports for the current year, if feasible,
- o Purge all LDC names not replying to two verification letters (estimated reduction of half of mailing list). This involves primarily second and later years savings because of costs of two mailings and list revision costs. Alternatively, make a concerted one-time effort to purge the mailing list by sending just one letter. Savings would be primarily in postage and printing because of fewer copies. This option should only be done with simultaneous efforts to strengthen the quality of the list of those wishing copies.

III.4.2 Sources of Additional Funds

- o Seek buy-ins on translations - from LAC and Africa Bureaus for Spanish, Portuguese and French translations - or alternatively from individual countries. Set a time period to achieve this and if the effort is unsuccessful, cancel translations, and provide Reports only in English.
- o Seek to continue buy-ins for bahasa Indonesia, Turkish and Arabic translations from Asia/Near East Bureau, or eliminate them.
- o Seek buy-in from Office of Health for one issue annually.
- o Establish a subscription basis for all recipients in developed countries (e.g.. \$20-30 per year). Subscription maintenance will be a cost, however. A higher price also could be charged for quantities purchased in developed countries, possibly increasing from \$1 each to \$2-5.

IV. POPLINE

IV.1 Observations and Findings

IV.1.1 Operations

The POPLINE project's operations fall into four main areas:

1. Data collection and processing - to identify and collect documents, to prepare bibliographic records of those documents including index terms and abstracts, to input these records into a machine-readable database and transfer this information to the National Library of Medicine (NLM).

PIP has contributed 65 percent of the database's records over the years and continues to add more than 4,000 records per year or 37 percent of the total increase in 1986.

2. Searches - to perform retrospective and current awareness searches on the POPLINE database in response to questions from LDCs or LDC-related individuals and institutions.

PIP performed 588 retrospective searches for LDC or LDC-related institutions in 1986. This is a reduction from previous years because many primarily medical questions are now referred to other centers as a result of NLM complaints of high volume of free usage at PIP. In addition, in 1986 PIP conducted 6,800 SDI (Selective Dissemination of Information) or Current Awareness searches, 94 percent of which were for LDCs or LDC-related organizations. SDI searches are computer-scored search strategies that are run against each month's input of new items to POPLINE for users who wish to be kept up-to-date on an area of particular interest.

3. Document delivery - to deliver copies of documents in the POPLINE database in response to requests.

Requests for 3,476 documents were filled in 1986, 59 percent of these from LDCs or LDC-related organizations.

4. Library acquisitions and processing - to maintain a library of journals, books, reports and other documents to support the database development, document delivery, and research and writing for the PIP staff.

PIP maintains a library of 423 journal and newsletter titles and 5,000 monographs, cataloguing and processing this material for use of the staff.

POPLINE is a bibliographic database which means that it includes selected information in a machine-readable format rather than the full

text of documents. The information pertaining to each document includes the author, title, source (book or journal title and citation data), descriptive or index terms from the POPLINE and the NLM Medical Subject Headings (MeSH) thesauri, address of the first author, corporate names if appropriate, language of the article, an abstract in English, and other more technical bibliographic information. Of approximately 4,800 documents input by PIP last year, about 1,500 or one-third have abstracts written by the author. About 90 percent of these abstracts are modified by PIP staff, who also write abstracts for the remaining two-thirds. In addition, 5,000 other documents from CPC, CPFH and PI are entered into POPLINE after being reviewed for duplications.

IV.1.2. Historical Data

The database was designed to support the writing of Population Reports and to serve as information resource for the population family planning field. It was made available directly to outside users in 1973 under the name POPINFORM, operated by the firm of Informatics, Inc. The Center for Population and Family Health (CPFH) at Columbia University began contributing bibliographic records the following year. Usage was low with a limited numbers of users.

In 1980, the database was moved to NLM and became one of 18 files on the MEDLARS system. In 1982, Population Index (PI) at Princeton University began sending its bibliographic data tapes to PIP for inclusion in the file. In 1985, the Carolina Population Center joined the system, and its database, Population Bibliography, was merged with POPLINE.

The database now has over 150,000 records of documents, compared with 67,000 in 1980, and is growing at about 10,000 per year. It includes information on the full range of subjects associated with population and family planning. Records of all types of documents are included: books, journal articles, technical reports, mimeographed papers, newspaper articles.

As a component of the MEDLARS system, POPLINE is accessible through any of the more than 3,000 MEDLINE centers in the United States, plus centers in 16 other countries. These centers include academic libraries, hospitals, research centers, and private companies, as well as individuals. Researchers in other countries can access POPLINE through direct communications links with NLM. Unfortunately, most LDCs do not have MEDLINE centers and, where they do exist, they are usually in the capital city. Costs of long distance telephone calls and procedural difficulties also create barriers to access in LDCs.

IV.1.3. Relationship with National Library of Medicine

The relationship between PIP/POPLINE and NLM/MEDLINE is strong and mutually beneficial. PIP supplies NLM with datatapes of records to be added to POPLINE on a monthly basis. NLM processes the tapes automati-

cally, adding index terms from MeSH vocabulary, and merges them with the rest of the POPLINE database.

POPLINE, as one of several special databases in the MEDLINE system, broadens the system's scope at no real cost to NLM. In addition, PIP provides one staff person at NLM to assist in processing and maintaining the database and training searchers in its use through MEDLINE's regular training operations.

In return, NLM provides worldwide access to POPLINE, directly through the 3,000 U.S. centers and indirectly through 16 centers around the world. POPLINE use is promoted through NLM publications and regular training courses, as are other MEDLINE databases.

Costs of POPLINE service to a user are the same as most of the other NLM databases: \$15-22 per hour, depending on the time of day. This charge represents the cost of operating the databases; there is no "profit" to NLM. These rates are substantially lower than what they were under POPINFORM and other databases from commercial vendors, which may run up to \$300 per hour. The Excerpta Medica database, comparable in scope to MEDLINE, costs \$84 per hour to search on-line. Before the CPC Population Bibliography was incorporated into POPLINE, it was available only through a commercial vendor for \$55 per hour.

IV.1.4 Recent Technological Economies

Linkage between POPLINE and the PPD database permits significant technological improvements and economies. PIP's purchase of BRS/SEARCH software during this contract period resulted in a number of current and future economies of scale. This software was picked particularly for its sophisticated search capabilities and the flexibility of its record format, both of which were necessary to handle both PPD and POPLINE data adequately.

Use of the software enabled PIP to shift from a full-service data processing subcontract for conversion of record data to machine-readable form to a simple keying contract. This shift dropped PIP's keying subcontract charges from \$2.25 per 1,000 characters to \$1.63, and also eliminated a monthly service charge of \$775. The software, initially purchased for use with PPD, can easily handle double the amount of data currently processed. It also can handle up to 25 users simultaneously. For a very little additional capital investment, PIP could easily increase the quantity of material processed for its databases and develop and maintain additional databases.

IV.1.5. Strengths and Weaknesses of the ^{Popline}~~Databases~~

Interdisciplinary databases such as POPLINE usually have problems because of different and sometimes conflicting terminology, concepts, and perspective among searchers trying to use it. The population/family planning field ranges from biomedicine to social science and includes education, operations research, program management, etc. The POPLINE

thesaurus provides a very effective way of organizing the index terms used to identify documents and facilitate search formulation. It has an alphabetical listing with brief definitions and relationships from term to term, as well as categorical, hierarchical lists.

Most databases restrict themselves to one or two forms of literature, such as journal articles or books, because of the difficulties involved in describing a variety of literature forms in one bibliographic record and processing and searching such records effectively. The POPLINE record format is sufficiently flexible to allow this broader variety of forms, and the MEDLARS ELHILL software is powerful enough to allow effective searching.

A multicenter database, that is, one accepting data from several sources, presents problems of assuring consistency in processing, especially in selecting index terms, and accuracy in the bibliographic record. All of the contributing centers have operated a database for years and have very experienced staffs. Procedures and computer programs such as INEROS have been developed to assure consistency and accuracy in processing and to prevent inputting two records for the same document.

Work is under way to clean up records entered in previous years with misspelled index terms, duplicate records, and inaccurate citations.

IV.1.6. Future Developments

Technological developments in communications, "user friendly" software, compact disks (CD-ROM), and the greater availability of personal computers will mean greater accessibility to POPLINE for users around the world in the coming decade.

As the cost of telephone communications has declined relatively and quality has improved, it has been possible to provide direct links between NLM's computers and searchers in several countries, e.g. Mexico, Colombia, and Brazil.

Compact Disks with Read Only Memory (CD-ROM) have the capacity to hold an entire database the size of POPLINE. A reader device which can be attached to a personal computer will allow a user anywhere to search the entire database and print out abstracts of any document. Presently, a master disk costs \$50-60,000, but copies can be produced for less than one-tenth of one percent of that. The most severe limitation currently is the difficulty in updating CDs. Additions of new records require replacement of the disk.

"User friendly" software, such as "Grateful Med" produced by NLM for searchers of MEDLINE, and/or MICRODIS, developed by AID, may be expanded to incorporate searching of POPLINE. NLM has experimented with CD-ROM but will not undertake further development because it considers that private vendors are willing and able to do it. These vendors also have developed user friendly software for CD-ROM databases and are likely to continue this development.

It is likely that the future will not be an either/or proposition for database users in LDCs. Those with terminals, printers, and adequate telecommunications with the United States or an overseas MEDLARS center probably will opt for direct communications. For them, the barriers are chiefly getting a user code and gaining familiarity with the database.

For others, especially institutions equipped with personal computers, databases such as MEDLINE and POPLINE probably will be available in a form such as CD-ROM or hard disk, perhaps in an abridged form. An abridged POPLINE currently is available in Bangkok at ESCAP. Although current usage is not high, the rate may increase as researchers there become aware of its availability.

India is now negotiating a bilateral agreement with NLM to make MEDLINE and POPLINE available through an Indian computer network based in New Delhi and connected by communications satellite with all parts of India down to the district level. The agreement specifies that POPLINE is of equal priority with MEDLINE. When implemented, this will make India the first overseas center to provide POPLINE access directly from in-house tapes.

Egypt has recently become a MEDLINE center and, with its well-financed population program, can be expected to seek access to POPLINE in the near future.

IV.2 Recommendations

The principal shortcoming of POPLINE is its lack of wide usage especially in LDCs. The following recommendations concentrate on ways of making the system better known and encouraging its wider use. The recommendations are presented in two groupings: general areas and service improvements/increased usage.

IV.2.1. General

IV.2.1.1. Usage Survey Since much of the use of POPLINE in LDCs is through intermediaries, tracing the extent of use is difficult. For example, from one-third to one-half of the POPLINE search time at Family Health International is used for searches that are sent to LDC individuals and projects.

A usage survey should be conducted as soon as possible, preferably in consultation with survey experts and with the assistance of NLM, AID cooperating agencies, AID's Research Division, and other organizations funding international research. The purpose would be to identify both direct users in the United States and other centers, and indirect users, such as PIP and AID cooperating agencies, to determine more completely who is using POPLINE, how useful it is, and what impact it is having. A follow-up survey should be undertaken in three years to assess results of improved marketing efforts recommended below (IV.2.2.3). The survey also

could address the usefulness of unpublished material, the value of abstracts, and the extent to which users, especially in developed countries, might be willing to pay a fee for searches.

IV.2.1.2 Expert Advisory Committee. An Editorial Advisory Committee guides PIP in evaluating and selecting topics and reviewing manuscripts for Population Reports. This group has served a useful purpose over the years as a review resource. Perhaps a similar type of expert advisory committee could guide the further development and marketing of POPLINE. Members might include persons knowledgeable about library science, technological innovations especially concerning telecommunications and advanced computer technology, and usage of reference materials. Other members might include representatives of MEDLARS and the subcontracting bodies, marketing specialists, AID Research Division, one or more Bureaus, the Office of Health. Discussions of such an advisory committee could focus on taking a close look at POPLINE operations, potential usage and impact in LDCs, ways to streamline the data bases, techniques for more aggressive marketing and for reducing expenditures.

IV.2.1.3 Outside Funding. Steps should be taken to encourage funding from other AID Offices and non-AID sources, in particular the National Institute of Child Health and Human Development (NICHD), which already funds PI. In the next few years, some support should be sought from NICHD for POPLINE, at least to the extent that it is used by and for U.S. research institutions.

PIP might develop a proposal for outside funding to test the utility of some of the technological developments mentioned in IV.1.6 in marketing POPLINE.

IV.2.1.4 Limiting Database. The subject scope of the database should be defined and limited. As Population Reports expand into other areas, it seems unlikely that POPLINE can include all these, such as oral rehydration therapy, primary health care, child survival, etc., especially since AID is financing the development of databases on these topics in other programs.

IV.2.2 Service Improvements and Increased Usage

Steps that would help improve service and increase U.S. and developed country usage include:

IV.2.2.1 User's Manual. Providing a brief User's Manual would reduce barriers to MEDLARS users, by extending the standard MEDLINE manual and showing specific features of searching POPLINE.

IV.2.2.2 Abbreviated Thesaurus. Wider use of the POPLINE Thesaurus would guide users of POPLINE, as would developing an abbreviated version of the Thesaurus with about 100 terms to illustrate specific terms included in POPLINE that expand on MeSH. These would include names of IUDs, oral contraceptives, contraceptive devices such as vaginal rings, etc., which the MeSH vocabulary has not adopted and which makes searching

MEDLINE less precise for such topics.

IV.2.2.3 Promoting POPLINE. More promotional efforts should be undertaken to make POPLINE known more widely and increase usage. Some steps that should be taken include:

- o PIP should develop a more aggressive marketing strategy to increase use of POPLINE in the U.S. and abroad. Population Communications Services (PCS) staff should be encouraged to promote POPLINE in their overseas trips. They might carry appropriate printouts with them to explain how useful POPLINE can be. Similarly, AID Population Officers should be given information on POPLINE and sample printouts for their country and region, and be encouraged to promote search requests. The Office of Population, particularly the Information and Training Division, should assist in this marketing effort, with AID Population Officers. A second user survey, as mentioned under IV.2.1.1, conducted in three years, could determine what effect this kind of marketing has had.
- o A special issue or part of an issue of Population Reports should be devoted to POPLINE, showing ways of access, the possibilities of the system, with illustrative printouts especially of contraceptive technology. The tone of the presentation should be clever, short, and promotional.
- o Population Reports should always include a search form on the back page, together with a simple explanation of how POPLINE should be used. This explanation also could publicize new locations for access to POPLINE.
- o POPLINE searches themselves should always include an evaluation form asking for information on how the documents obtained were used, how useful they were, and whether the person requesting them plans to use POPLINE again and will tell others about it. Search request forms in each of the languages in which the Reports are published should be distributed with the issue and through cooperating agencies.
- o More centers and research institutions should provide direct access to POPLINE around the world, and especially in LDCs. PIP should contact institutions in LDCs and ask about potential interest in providing such access, especially targeting key research institutions to ask if they use POPLINE and if not, explaining how it can be useful to them. PIP also should make personal presentations where possible to show what POPLINE is, what is needed to get started, and how to do it. PIP representatives should take sample printouts when they visit LDCs, and encourage PCS staff to do the same when they go to LDCs.
- o A successful research project involving searching for ways to apply new technologies in centers and research institutions also

will promote increased usage.

IV.3 Potential for Budget Reductions/Increased Revenue

Undoubtedly the potential benefits of POPLINE have not yet been realized to the fullest. But given the investment already made in developing such a highly sophisticated product, it would be extremely shortsighted to abandon the project at this time before making a serious attempt at marketing it more aggressively to increase its usage and its value to LDCs, as recommended above. At the same time, realistic reductions can be made to limit costs while still maintaining an effective and useful system. It seems possible that some cuts could be absorbed by the system without seriously impairing it. Such reductions, and opportunities for increased revenue, with their implications for the program, include:

IV.3.1 Streamlining the database. Several possibilities exist for streamlining the database by limiting the sources of information. One way would be to reduce or eliminate the subcontract with Population Index (PI) and Carolina Population Center (CPC). Another way would be to eliminate some types of literature, such as unpublished documents and/or newspaper articles, or by simplifying the processing of these and other materials. If abstracts were not modified as they are now for 90 percent of the documents, and if documents without abstracts were limited, substantial savings could be made.

However, reducing PI's subcontract by 50 percent and just paying for the datatapes will reduce PI's ability to acquire documents and reduce their contribution of records by 25 percent or from approximately 4,000 to 3,000. Eliminating unpublished material or newspaper articles will affect some subject areas severely. Population law and policy relies heavily on newspaper articles, and much of the program data come from unpublished often mimeographed reports. For example, the most authoritative data on contraceptive prevalence in the Philippines were available for years only in unpublished reports. Also, these materials are particularly valuable in obtaining programmatic information for Population Reports. While Population Reports production would not be crippled by proposed reductions in POPLINE, it would undoubtedly be more difficult, time-consuming, and expensive to gather such data. (See Appendix D for comparison figures.)

IV.3.2. Charging for Searches. Implementing charges for all U.S. and developed countries' users for searches and for documents has been done only to a minor extent in the past. This could be expanded greatly.

IV.3.3. Eliminating Previews. Only about 500 copies of POPLINE Previews are now issued and have limited impact. These could either be eliminated entirely or offered on a subscription basis to meet costs.

IV.3.4. Ending Exhibitions. PIP staff now travels to conferences outside Baltimore to exhibit and demonstrate POPLINE. This travel could

be eliminated. The potential U.S. user population probably has become adequately acquainted with POPLINE or is sophisticated enough to learn easily how to access it, although it might be necessary to resume demonstrations in the future as new individuals enter the population field.

IV.3.5. Revision of Thesaurus. The revision and reprinting of the Thesaurus could be postponed or eliminated, or it could be offered at a price that would repay the costs involved.

IV.3.6. Revision of Brochure. Revision of the POPLINE descriptive brochure could be postponed or eliminated. Alternatively, a simplified explanation of POPLINE could be included in a future Population Reports and reprints of that text made for distribution.

Numbers IV.3.3 to 3.6 are only short-term savings and if carried on indefinitely are likely to slow the expansion of the user population.

IV.5 Conclusions

These balancing recommendations for marketing POPLINE at minimal additional cost, while considering reductions in expenditure and a slightly reduced program, recognize that POPLINE is part of the basic cost of running a technologically competent, development-oriented program. There is nothing else like it to serve the interdisciplinary nature of population research, nor are there any really satisfactory alternatives to replace it. AID's Library and its Development Information Division believe that cutting out POPLINE would have a severe impact.

With some of these proposals in place, AID should monitor the program closely over the next one to five years to revalidate the project design, determine what technological innovations might be instituted to make the system stronger, more usable and perhaps less expensive, monitor the indices of LDC use as supplemented by the new survey suggested, and evaluate it again during that period.

APPENDIX A - TOPICS OF POPULATION REPORTS

<u>Series</u>	<u>Number of Issues</u>
Oral Contraceptives	6
Intrauterine Devices	4
Female Sterilization	9
Male Sterilization	4
Law and Policy	7
Barrier Methods	7
Periodic Abstinence	3
Family Planning Programs	33
Injectables and Implants	2
Issues in World Health	6
Special Topics	9

Topics 1982-1987

<u>Date</u>	<u>Title of Publication</u>	<u>Series & No.</u>
<u>1982</u>		
May-June	Oral Contraceptives in the 1980s	A-6
July	IUDs: Appropriate Contraceptive for Many Women	B-4
Sept-Oct	Update on Condoms: Products, Protection, Promotion	H-6
Nov-Dec	Community-Based Health & Family Planning	L-3
<u>1983</u>		
Jan-Feb	Sources of Population & FP Assistance	J-26
May	Long-Acting Progestins: Promise & Prospects	K-2
July	Infertility & Sexually-Transmitted Disease	L-4
Sept-Oct	Migration, Population Growth & Development	M-7
Nov-Dec	Vasectomy - Safe and Simple	D-4
<u>1984</u>		
Jan-Feb	New Developments in Vaginal Contraception	H-7
March	Breast Feeding, Fertility & FP (Rev. from '81)	J-24
May-June	Healthier Mothers & Children Through FP	J-27
July	Oral Rehydration Therapy (Rev. from '80)	L-2
Sept-Oct	After Contraception: Later Childbearing	J-2
Nov	Laws & Policies Affecting Fertility	E-7
<u>1985</u>		
Jan-Feb	Impact of FP Programs on Fertility	J-29
May	Minilaparotomy and Laparoscopy	C-9
July-Aug	Contraceptive Social Marketing	J-30
Sept-Oct	Fertility & Family Planning Surveys: An Update	M-8
Nov-Dec	Youth in 1980s: Social & Health Concerns	M-9
<u>1986</u>		
Mar-April	Immunizing the World's Children	L-5
May-June	Operations Research; Lessons for Policy, Programs	J-31
July-Aug	AIDS - A Public Health Crisis	L-6
Oct-Nov	Radio - Spreading the Word on Family Planning	J-32
Dec	Family Planning for Men	J-33
To Be Published:		
<u>1987</u>		
Mar-Apr	Long-Acting Methods: New Advances	K-3
May-June	Employment-Based Family Planning Programs	J-34

-B1-
APPENDIX B

REPORT ON 1986 READERSHIP SURVEY

In March 1986, the Population Information Program conducted a survey of readers in LDCs, "key persons" (i.e., those with a title of Director, Chief, Minister, etc.), and AID population officers. Out of 3,558 questionnaires mailed to readers in 30 high priority countries, 618 were returned, for a response rate of 17.4%. This response rate was similar to that for a readers' survey in 1980, but at that time, only 138 questionnaires were received out of 796 sent to 43 countries (distributed by Population Officers). Of the two other groups queried in 1986, 28 responses (out of 35 sent) were received from population officers, and 64 from key persons (out of 387 sent - 16.5% return rate). PIP has prepared statistical reports of the survey which are shown starting on the next page.

The questionnaire responses included fairly large numbers from several countries: for example, 92 from India, 60 from Brazil, 55 from Mexico, 42 from Nigeria, 38 from Egypt, 32 from Kenya, 30 each from Philippines and Ghana. However, the survey was made by PIP rather than an outside body, and respondents were required to fill out and mail back their questionnaires at their own expense. Thus the reliability and objectivity of their replies are questionable, since those with positive views were more likely to respond. Also, the questions asked were quite broad.

Nevertheless, the results do give what is probably the most representative reaction one can receive today without sending out a survey from an outside surveying organization and paying for return postage, or what would be even better, using an unbiased surveyor to interview readers in different countries personally.

PIP MAILING STATISTICS
(as of December 6, 1986)

Total addresses: 93,703 Total copies: 123,994

Addressees: Individuals: 76,511 Title/Organization: 17,192

Medical: 48,994 Nonmedical: 42,171 Public Health: 1,104

Single Copies: 89,670 2-4 copies: 2,815 (addresses) Over 4 copies: 1218

Added by special request of individual: 32,246

Replied to recent questionnaire: 19,012

Binder requested and sent: 7,781

Year list was last updated: 86- 12573; 85- 12,100; 84- 11,143; 83- 19,803
82- 11,991; 81- 6,960 80- 7,062; 72-79- 12,071

English: Total addresses: 51,358 Copies: 62,182

Spanish Total addresses: 20,621 Copies: 27,032

Portuguese: Total addresses: 10,493 Copies: 16,735

French: Total addresses: 7,570 Copies: 12,969

Arabic: Total addresses: 3,661 Copies: 5,076

(See tables in Section III for categories and country groupings)

APPENDIX D
POPLINE STATISTICS

POPLINE Usage in On-Line Hours

15 hours (commercial US users)
25 hours (international agencies)
150 hours (estim.) (AID Research Division)
162 hours (AID cooperating agencies) (much in response to LDC requests or for information for LDC programs)
300 hours (other U.S. center - univer- sities, hospitals, governments)
360 hours (CPFH, PI, CPC) (database preparation and maintenance)
814.29 hours PIP (6796 SDI searches - (94% LDC or LDC related) (588 retrospective searches - (82% LDC or LDC related) (staff use to prepare Pop. Reports) (database maintenance and processing)

Total on-line hours 1986 = 1823

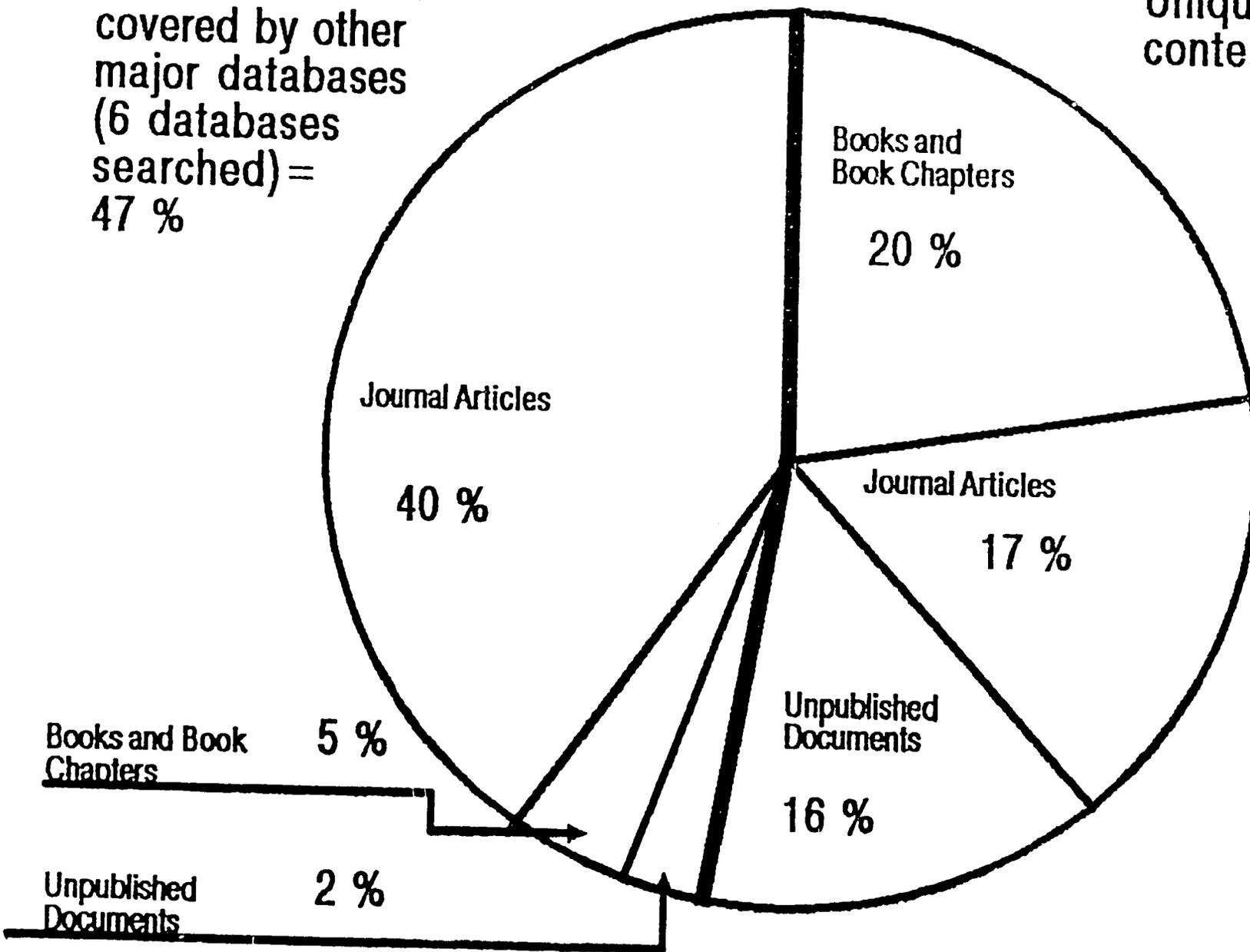
(rough)

34-

POPLINE CONTENT

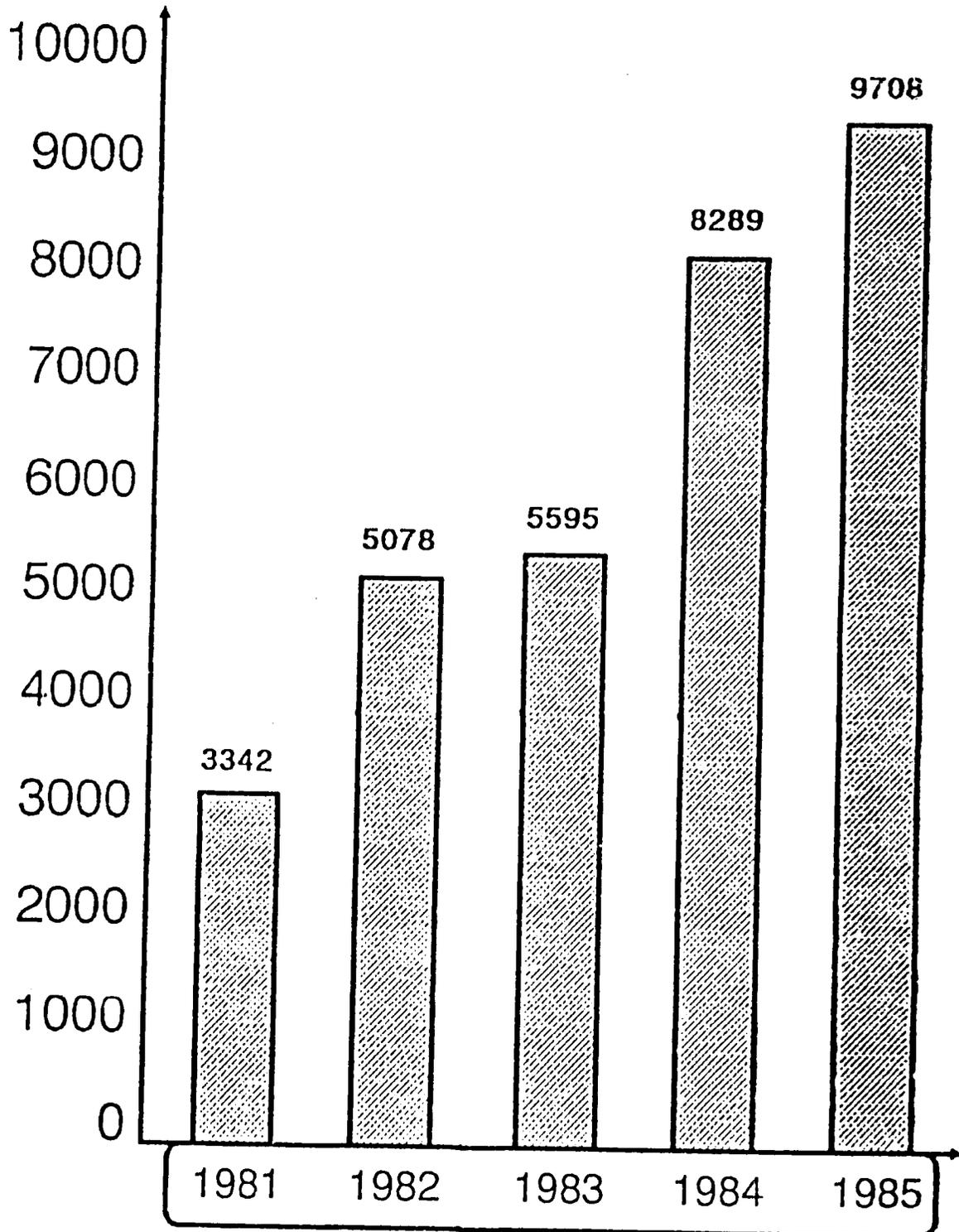
POPLINE content covered by other major databases (6 databases searched) = 47 %

Unique POPLINE content = 53 %

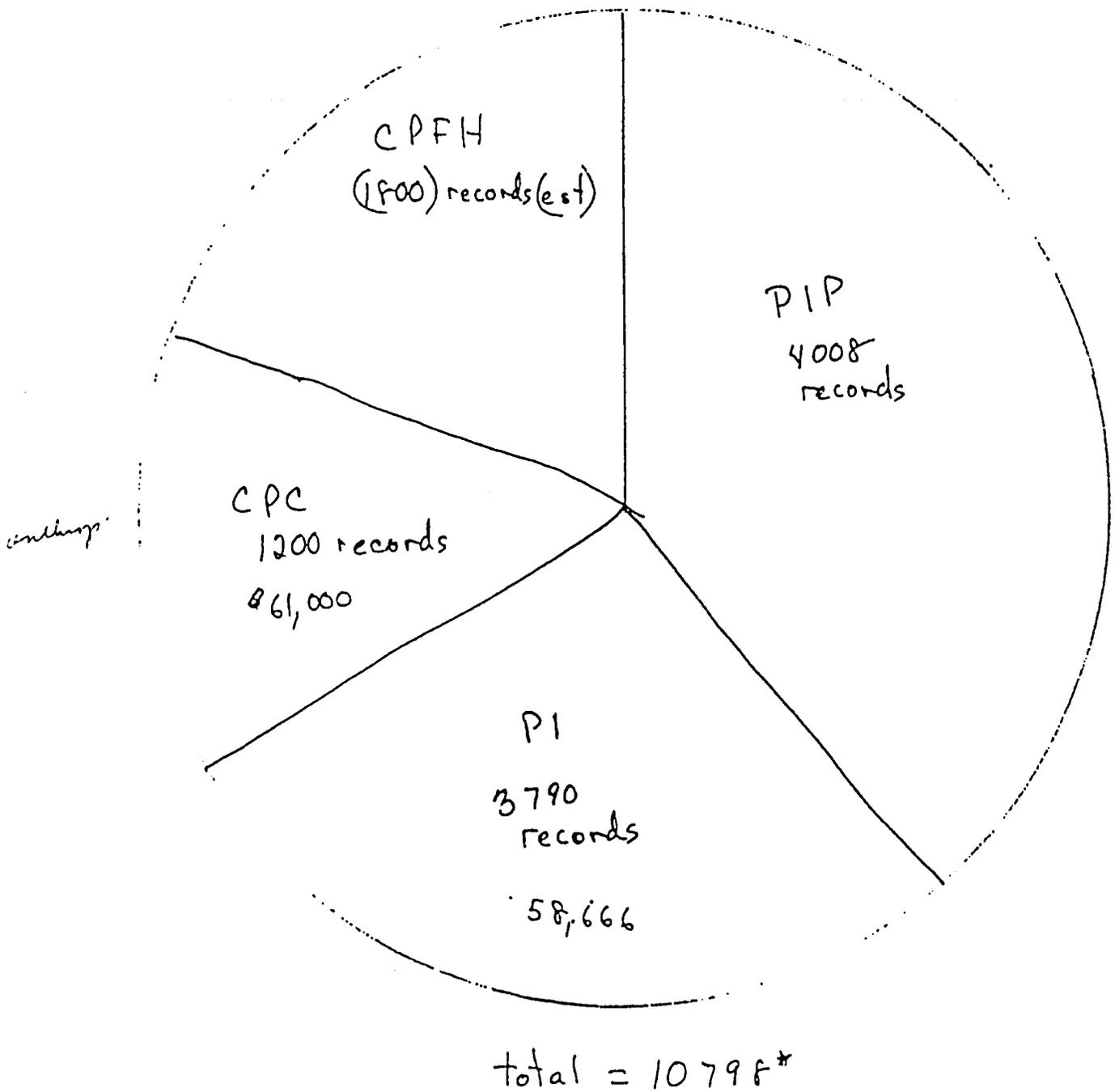


25

POPLINE Searches for LDC's 1981 - 1985



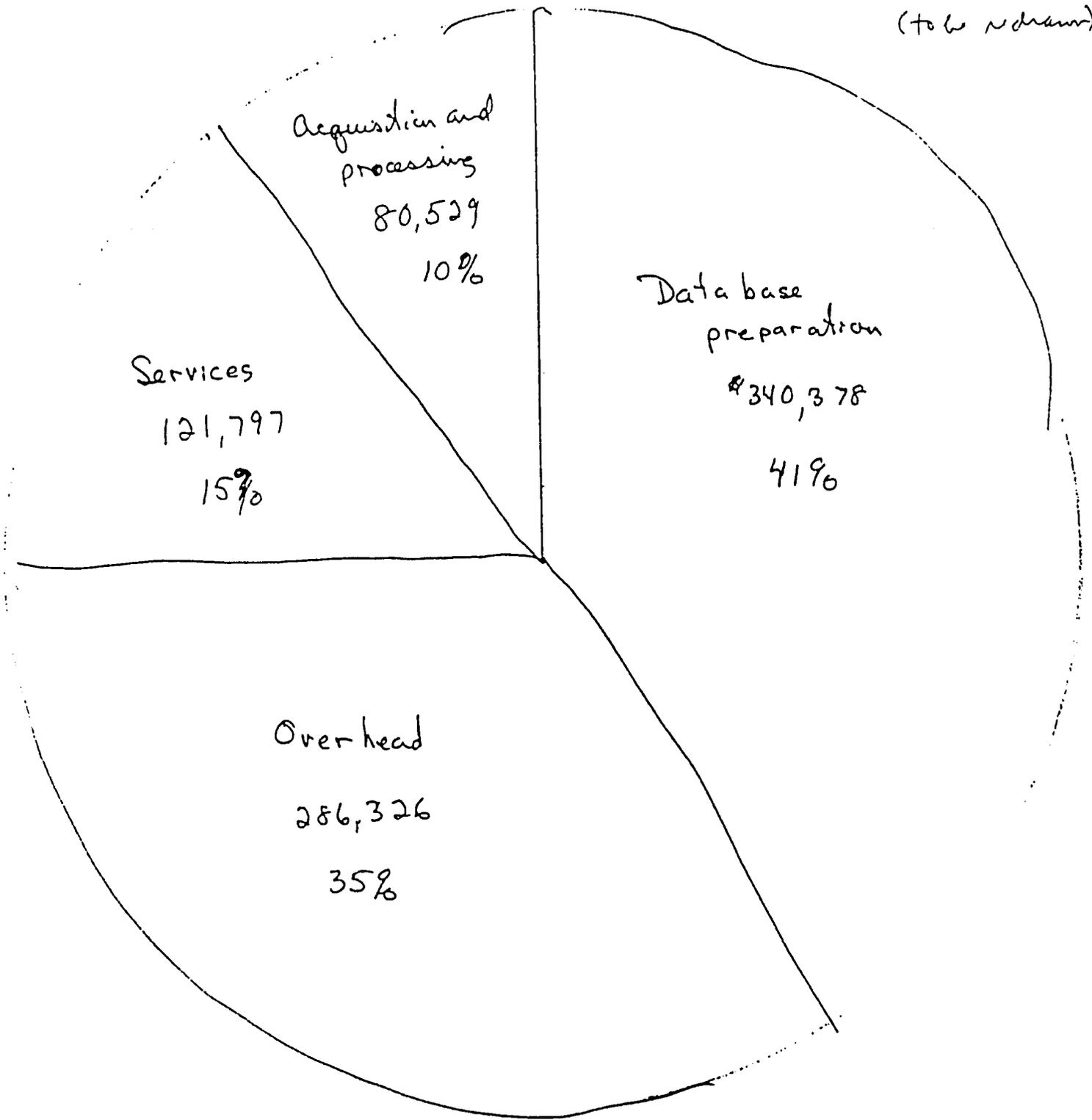
(to be redrawn)



Records input Oct. 1985 - Sept 1986

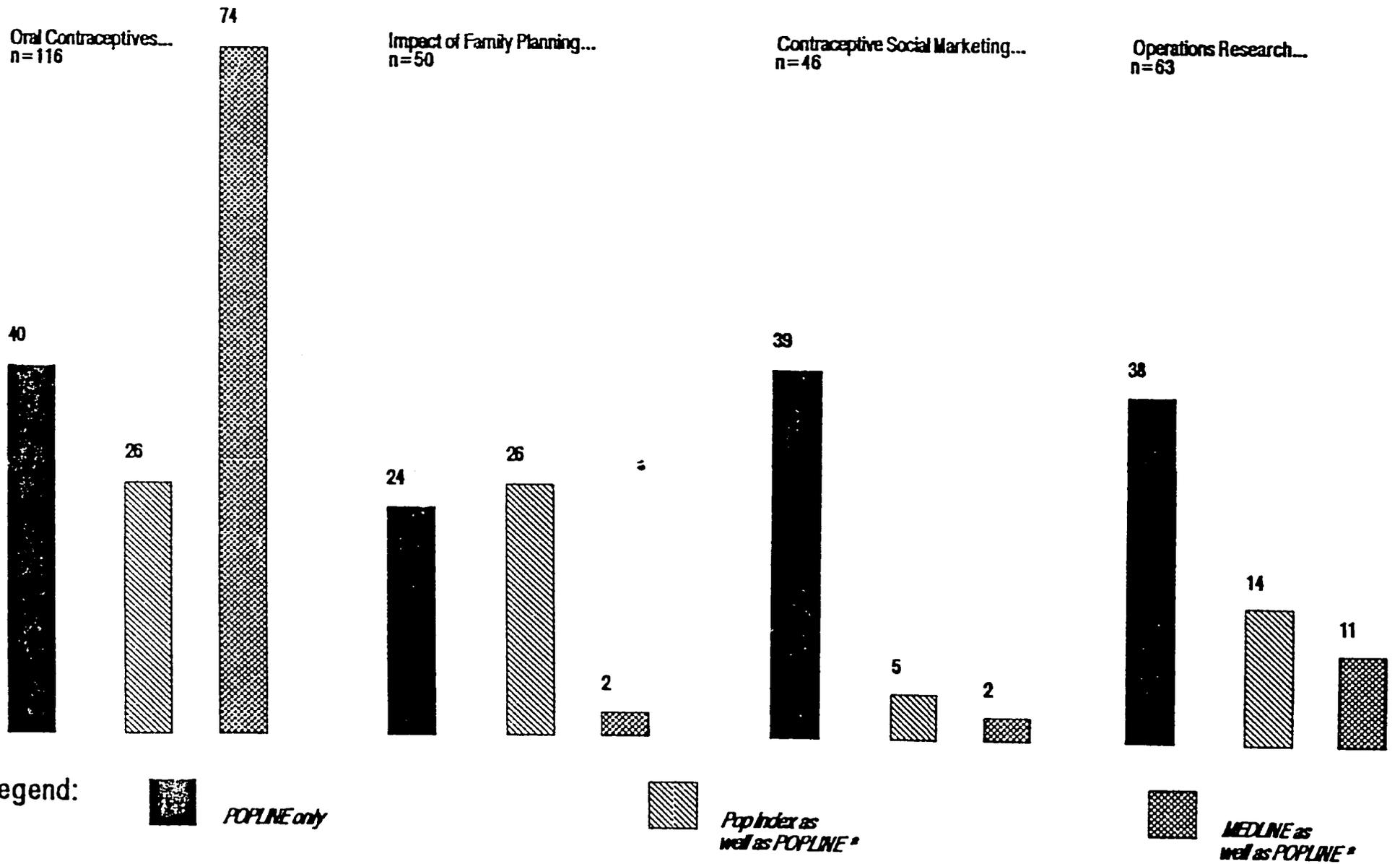
* NLM figures show 9028 records input during this time period. The difference is due to ~~records~~ the same records being input by more than one

(to be redrawn)



POP LINE Costs

Number of Documents Coded as of "Particular Value" in Four Issues of Population Reports Covered by MEDLINE, Population Index, and POPLINE



* There is an overlap between the number of documents reported for Population Index and MEDLINE

APPENDIX E

PERSONS INTERVIEWED BY EVALUATION TEAM

At AID:

Duff Gillespie, Director, Office of Population
Barbara Kennedy, Associate Director, Office of Population
Anne Aarnes, Chief, Information & Training, Office of Population
Earle Lawrence, Population Officer, Office of Population
David Oot, Deputy Chief for Health/Population, Near East & Africa
Gerold van der Vlugt, M.D., Chief, Health Popul. & Nutrition, Africa
Maria Mamlouk, Analyst, Population Division, Latin America
Maura Brackett, Chief, Population Division, Latin America
James Shelton, Director, Research Division
Jerry Bailey, Research Division
Jeff Spieler, Research Division
Anne Tinker, Chief Health Services Div., Office of Health
Lee White, Deputy Director, Development Information Division, Center for
Development Information and Evaluation
Karen Keyes/Ruth Mara Development Information Division, CDIE

At PIP:

Phyllis Piotrow, Director
Walter Stender, Associate Director
Ward Rinehart, Associate Director and Editor
Anne Compton, Coordinator, Resource Center
Laurie Liskin, Staff Associate (writer)
Richard Gilluly, Staff Associate (writer)
Kathleen Stenger, NLM Liaison/Librarian

Others:

Wendy Baldwin, National Institute for Child Health & Human Development
Nicholas Dodd, U.N. Fund for Population Activities
Jacqueline Forest, Alan Gutmacher Institute
Richard Hankinson, Population Index
Robert Hatcher, Emory University Family Planning Program *
Douglas Huber, Association for Voluntary Surgical Contraception
Richard Lincoln, Alan Gutmacher Institute
Richard Moore, Population Council
John Paxman, Pathfinder Fund
Jeffrey Perlman, NICHD
Roger Rochat, Emory University School of Medicine *
John Ross, Center for Population and Family Health
Patricia Shipman, Carolina Population Center
Joseph Speidel, Population Crisis Committee *

(* = Member of Editorial Advisory Committee)