



LABORATORIES FOR
POPULATION STATISTICS

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COMPREHENSIVE SEMI-ANNUAL PROGRESS REPORT
to the Agency for International Development

International Program of Laboratories for Population Statistics

(POPLAB)

1 October 1979 to 31 March 1980

THIS DOCUMENT IS DRAFTED TO GIVE A COMPREHENSIVE PICTURE
OF THE ENTIRE POPLAB PROGRAM AND AT THE SAME TIME
TO SATISFY THE SPECIFIC REQUIREMENTS OF CONTRACT AID/DSPE-C-0025

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BIRTH AND DEATH DATA COLLECTION PROJECT
Semiannual Progress Report
1 October 1979 - 31 March 1980

-OUTLINE-

- A. PROGRAM DIRECTION
- B. CURRENT PROJECTS
 - 1. Indonesia
 - 2. Mexico
 - 3. Colombia
 - 4. Somalia
 - 5. Bolivia
- C. NEW PROJECT DEVELOPMENT
 - 1. Jordan
 - 2. Korea
 - 3. Ecuador
 - 4. Kenya
- D. DATA PROCESSING UNIT
- E. DATA ANALYSIS UNIT
- F. BROAD SURVEY
- G. TECHNICAL SEMINARS
- H. PUBLICATION PROGRAM

APPENDIX

- A. POPLAB Staff
- B. Financial Status Report
- C. Project Planning Schedule

11

BIRTH AND DEATH DATA COLLECTION PROJECT
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A. PROGRAM DIRECTION

Efforts of POPLAB during this period shifted with major emphasis being placed on implementation of fertility/mortality surveys in Indonesia, Mexico, Colombia and Somalia. A contract was also signed for a survey in Bolivia, bringing the total number of survey contracts to five. There were 13 person-visits to the four current projects to provide technical assistance. The Resident Advisor and his wife obtained a house and were settled in Surabaya, Indonesia.

Project development efforts have continued. Exploratory or contract visits were made to the Philippines, Ecuador, Thailand, India, Jordan and South Korea. A proposed contract for a birth and death survey was developed with South Korea and will be submitted to AID/W for approval.

Considerable progress has been made in the development of the draft of the Broader Survey Questionnaire.

The consultant roster has been extended to include a total of 20 experts who are available to assist POPLAB on short notice. In connection with project development travel, the director attended the meeting of the International Statistical Institute in Manila in December to attend scientific sessions, for liaison with other demographic and statistical organizations and for meeting with cooperating officials from other countries.

Through letters, telephone conversation and personal visits, liaison with the following organizations has continued: World Fertility Survey, United Nations, National Academy of Science, Committee on Population and Demography, Centro Latinoamericano de Demografia, East West Population Institute, DUALabs, Delta Systems, Census Bureau, Population Reference Bureau, and Westinghouse Health Systems.

Amendment #4 to the contract added \$850,000 of the third year budget changing the approved budget to \$2,834,000, leaving a deficit of \$564,009 at this time.

B. CURRENT PROJECTS

Current projects are those projects for which POPLAB has a subcontract signed by the country unit and UNC, and approved by AID/W. There were five such projects at the end of this reporting period representing an increase of three during the six-month period. Each project is briefly discussed in this section.

INDONESIA

During the period the East Java Multiround Survey (EJMRS) progressed according to the schedule specified in the subcontract between UNC/CH and the Central Bureau of Statistics (CBS). Major events included the arrival

of a UNC/CH Resident Advisor in Indonesia, the completion of preparations for the baseline survey round and a site visit from POPLAB, Chapel Hill.

Mr. Stephen E. Wilson arrived in Indonesia on 29 September 1979 and started a two-year tour as the UNC/CH RA. He immediately began work with the Project Monitor, Dr. S. Suharto (CBS). Liaison with the E.J. Census Office was established and Project Steering and Working Committees were formed. Initially Wilson's activities were focused on planning for the survey with the CBS staff in Jakarta but later shifted to Surabaya and the staff at the East Java Census Office, in particular Messrs. Soekajat and Mahmudi. With respect to administrative and personnel matters, Wilson encountered difficulties in obtaining a Residence Visa, gaining duty-free import privileges and finding suitable living accommodations in Surabaya. It took about four months to resolve these problems so that by February 1980, the Wilsons were settled in a rented house in Surabaya and had been granted a Residence Visa and duty-free status. The resolution of these problems was facilitated by amendment #2 to the UNC/CH-USAID/Washington contract (dated 25 September 1979) which specifically states that the UNC/CH RA was entitled to duty-free status.

Preparations for the baseline survey round involved the completion of: sample identification, mapping of sample areas, household listing, questionnaire design and questionnaire printing. In addition, the decision was made that the interviewers and supervisors for the survey would be the CBS field staff of mantri statistics. Training of these personnel is scheduled for the period from April 16 to April 19 in Malang, East Java. Field work for the baseline survey will follow during the first week of May. UNC/CH partial funding for these activities has been sent to CBS (two installments totaling \$58,503.58).

The site visit from POPLAB was made by Dr. J.M. Sullivan (11 February-2 March). Progress on the EJMRS was reviewed and future project needs were identified. Editing, coding, machine entry and analysis of the baseline data are planned for the E.J. Census Office. Much of this work will be accomplished on a computer newly installed at the E.J. Census Office. The EJMRS data will be the first to be processed on this machine. Because operational difficulties are anticipated, POPLAB, with CBS concurrence, is planning a data management and analysis visit for mid or late summer (1980).

In addition to the EJMRS project, POPLAB has been planning a Broader Survey in East Java to be conducted in conjunction with CBS. Discussions have progressed to the stage that a visit to negotiate a contract is planned for mid-July. Dr. Richard Bilsborrow is scheduled to conduct those negotiations.

MEXICO

POPLAB made two TDY visits to Mexico during this period, one in October to participate in and assess fieldwork, and one in March to make recommendations regarding data cleaning, preparation of files, and analysis plans.

The Survey in Mexico was completed during this report period (Dec. 1979) and POPLAB is currently assisting the Mexicans in analyzing the data, and

writing a preliminary report to be presented to Government officials in May. Two Mexican representatives are expected to visit POPLAB in April for a week to confer on analyses of fertility and mortality levels, particularly by the use of indirect methods.

POPLAB has received an invitation to participate in a large conference at El Colegio de Mexico on April 17-18, where the methodology and some preliminary results will be presented and discussed by the academic community.

Plans are being made in POPLAB for two Mexico visitors to come in June for an extended period of 2-3 months to do in-depth analyses of data and work on the final report for the Survey as well as other papers.

COLOMBIA

The Colombia contract was finalized during this report period following a trip in November 1979 by J. Abernathy and E. Chanlett. The contract was effective 1 September 1979 and concludes on 31 March 1981.

This report period has been devoted mainly to preparing for the survey to be conducted in June. The problem of acquiring the sample materials from the Ministry of Health was resolved in December and work was begun toward updating the sample. Technical assistance was provided DANE in March when E. Chanlett worked with them on questionnaire design, pilot test, field work plans and preliminary data management.

DANE has officially requested that POPLAB provide consultants to install and provide instruction on CONCOR, CLUSTERS, OWNCH and other computer programs required in processing and analyzing data from the 1980 Survey. They also requested that POPLAB send experts to DANE to provide formal instruction in indirect analytic techniques. POPLAB is attempting to hire appropriate consultants to handle these requests.

SOMALIA

In November 1979, A. Cross, M. Nizamuddin and R. Baker visited Somalia and negotiated a subcontract with the State Planning Commission to conduct a demographic survey in the regions of Bay and Lower Shebelle. The subcontract has since been approved by all parties and became effective 1 January 1980.

In January, A. Cross returned to Somalia to assist in conducting a pretest. After an eight-day training course, nine interviewers enumerated a total of 119 households covering all three sectors--urban, rural settled and nomadic. The pretest provided invaluable practical experience for all involved and resulted in a number of modifications to the questionnaire. A detailed report on the pretest operation has been written.

In March, M. Nizamuddin and W. Kalsbeek visited Somalia to design the sample for the settled population. During the visit, the first-stage sample was selected for urban areas and procedures were developed to chunk and segment these primary units into smaller clusters and to select the final

sample. Methods were also designed to match the list of villages against maps to produce a more complete list of villages for the rural sample frame. M. Nizamuddin stayed on to assist in implementing both these procedures.

At the time of the sampling visit, a decision was reached to include Mogadishu in the study area, both to improve the sample design and to increase the target population to approximately one-third of the country. In order to reflect this change in the original agreement, Amendment #1 to the contract was drafted and is currently awaiting approval.

BOLIVIA

At the invitation of the Instituto Nacional de Estadística (INE), J. Abernathy and O. Wolowyna went to Bolivia in February for the purpose of negotiating a subcontract for a demographic survey. At the request of INE, the Centro Latinoamericano de Demografía (CELADE) was also invited to provide technical assistance to INE for carrying out the survey. Agreement was reached with INE on all aspects of the subcontract, which was written in English and Spanish during the visit. J. Chackiel from CELADE participated in the contract negotiations.

The subcontract has been approved by AID/W and UNC/CH. The survey will be national in scope and is expected to provide national estimates of fertility and mortality. A schedule of technical visits to Bolivia by POPLAB and CELADE technical staff was agreed upon during the contract visit. The first visit is scheduled for April 21, 1980.

C. NEW PROJECT DEVELOPMENT

Development of new projects is a continuous activity of POPLAB and several countries are in the category of potential future projects. The status of each is briefly described.

JORDAN

In connection with other travel, the POPLAB Director made a brief visit to Amman in January. This visit confirmed the continuing interest of the Department of Statistics, under its new Director, in collaborating with POPLAB in a birth and death survey, possibly in 1981.

A POPLAB team (Wells and Nizamuddin) will visit Jordan in May to develop a workplan and a subcontract for the project.

KOREA

During this period J.M. Sullivan made a contract negotiations visit to Korea (11-25 March 1980). This resulted in the drafting of a tripartite contract between POPLAB, the National Bureau of Statistics of the Economic Planning Board (NBOS) and the Korean Development Institute (KDI). The contract specified collecting birth and death data within the framework of an ongoing multi-round survey, the Continuous Demographic Survey. This survey, conducted by NBOS, has been collecting data by monthly visits to national

sample of approximately 20,000 households. The draft contract specified a project involving one year's data collection. The time period for the field work is projected to run from mid-1981 to mid-1982. POPLAB funding for the project (\$88,895) is considerably less than NBOS funding (\$395,410).

The draft contract is currently under review by the contracts office at UNC/CH and USAID/Washington. An initial activity, assuming the project is approved, will be a project design and sampling visit by POPLAB representatives in June or July (1980).

ECUADOR

R. Bilsborrow was in Ecuador in December to discuss the content of the proposed contract between INEC and POPLAB to carry out a broad survey in Ecuador in 1981. The bulk of a draft contract and a detailed budget was prepared for review by INEC, UNC/CH and USAID/Washington (and USAID Mission). The survey would collect data to permit the estimation of fertility/mortality levels and trends. It would also provide data for an analysis of the determinants of fertility through an in-depth survey of a nationally representative subsample of 2,000 households in which all women aged 15-49 and their husbands (if present) would be interviewed regarding fertility, nuptiality, breast-feeding, use of contraceptives, infant care, work history, and income.

Potential budget problems were apparent during this visit. A minimum budget of \$490,000 was arrived at, with the INEC share being about \$170,000, having a balance of \$320,000. This balance is at \$120,000 higher than the maximum POPLAB contribution, which would have to come from other sources.

Bilsborrow expects to continue budget discussions, including considering possible third sources of funds for the broad survey, during his next visit in April 1980. At this time a complete draft contract will be prepared.

KENYA

During a visit to Nairobi by Adlakha and Cross in March 1979, officials in the Central Bureau of Statistics expressed an interest in a broader survey to be carried out in 1982. In February 1980, Mr. Parmeet Singh, Director, CBS wrote to POPLAB expressing continuing interest in a survey in 1982 and suggested a preproject visit by POPLAB staff in the fall of 1980.

D. DATA PROCESSING UNIT

The current activities of the DPU are briefly described, as follows:

1. The first phase of developing a package of computer programs for indirect estimation techniques of fertility and mortality is almost completed. Computer programs for the following techniques are ready for use: (a) age distribution - population pyramid, (b) Myers Index, (c) Whipple Index, (d) Brass $\frac{P}{F}$ and $\frac{P_1}{F_1}$ methods, (e) Coale-Trussell Model Fertility Schedules,

(f) Arretx Method for Fertility Estimation, (g) Arriaga Method for Fertility Estimation, (h) Own Children Method, (i) Children Ever Born program, (j) Calculation of Mean Childbearing Age, (k) Estimation of Infant Mortality: Brass-Sullivan-Trussell-Feeney Methods, (l) Female Orphanhood Method for estimating adult mortality.

All programs are written in FORTRAN, except the Myers and Whipple Indices and the Brass $\frac{P}{F}$ and $\frac{P_1}{F_1}$ programs, which are written in APL, an attractive language. Currently the Infant Mortality program is being modified in order to add procedures when mortality has not been constant, developed by Trussell Paloni and Sullivan.

2. A new DECwriter III computer terminal has been installed. It has APL capabilities, and is capable of communicating at 1200 BPI, and prints very fast.

3. O. Wolowyna visited the International Demographic Statistics Office U.S. Bureau of the Census. The visit had three purposes: (a) to exchange information about demographic research in developing countries, (b) to get acquainted with the operations of the data processing branch, and profit from their data processing experience in developing countries, and (c) to obtain computer programs for indirect estimation techniques developed at the International Demographic Statistics Office.

4. Hardware and software capabilities in developing countries are being assessed using the questionnaire developed by Krasowski. This information helps to plan data processing and computing assistance when the need arises.

5. The data processing unit's staff has been actively preparing for the analysis of data from the Mexican survey. Programs for file processing and production of tables needed for indirect estimation of fertility and mortality analysis are being written and tested.

Plans for the Future

1. To improve the package of computer programs by adding a program for estimating mortality from widowhood data, a program for the death distribution technique, and keep the present programs up-to-date with improvements being developed by demographers.

2. Develop written guidelines for data processing.

3. To provide data processing assistance to the Departamento Administrativo Nacional de Estadística (DANE), Colombia, in relation to the 1980 National Demographic Survey. It is expected that the surveys in Somalia and Indonesia will also require data processing assistance.

4. A visit by O. Wolowyna and R. Krasowski is planned to the data processing branch of the International Statistics Office, Bureau of the Census, in order to discuss with their staff strategies for providing data processing assistance to developing countries.

E. DATA ANALYSIS UNIT

The data analysis unit was formed to assist country project coordinators in planning for the various analyses and in writing country reports. During the current reporting period, the DAU met on several occasions to discuss the computer programming needs and a standard format of the country report. A list of computer programs necessary for analysis of countries' data was made and forwarded to data processing units for making them available. A detailed outline for a standard report was finalized and first drafts of several sections were prepared.

F. BROAD SURVEY

During the period, complete draft questionnaires were developed as follows: Household Questionnaire (slightly modified version of the "Basic Demographic Questionnaire" in POPLAB Manual 7); the Women's Questionnaire; and the Husband's/Head's Questionnaire. During the period January 1 - March 15, 1980, the POPLAB Broad Survey Committee (Adlakha, Chao, Cross, Nizamuddin, and Bilborrow, Chairman) met usually twice per week for extended sessions on draft sections of the questionnaires, which were redrafted various times. Finally, complete drafts were brought together and circulated to other POPLAB staff and colleagues at UNC as well as elsewhere for comments.

The proposed content of the two individual prototype questionnaires is briefly as follows. The Women's Questionnaire will include blocks on such things as fertility and marital history, family planning, spacing of last two births, children's activities, labor force history and earnings. All women aged 15 to 49 will be interviewed. The Husband's/Head's Questionnaire will cover housing and land, household assets, abbreviated marital and fertility history, partial labor force history and earnings, and household income.

The Community Questionnaire is being drafted as of this writing.

In June-July, after comments are received, the questionnaires will be revised and a draft POPLAB manual produced (Manual 9) which will incorporate background, justifications, and explanatory comments on all four questionnaires. Subsequently an Interviewer's Manual and other materials will be drafted to accompany the prototype questionnaires.

It should be noted that the questionnaires will be modified for any actual country implementation, taking into account country interests and culture.

G. TECHNICAL SEMINARS

During the six-month period the POPLAB professional staff participated in a program of technical seminars, as follows:

11/6/79 Dennis Chao, Ph.D., Postdoctoral Fellow, POPLAB:

"The Influence of Economic Development and Medical Advancement on Regional Longevity--An Econometric Study of Taiwan"

12/14/79 Francis D. Madigan, S.J., Director, and Alejandro N. Herrin, Mindanao Center for Population Studies, Xavier University, the Philippines:

"Declining Fertility: A 1977 Survey Study of Fertility Levels and of Prevalence in 20,000 Philippines Households"

1/10/80 Carol Carpenter, Ph.D., University of Michigan:

"Fertility-related Knowledge and Attitudes of Turkish Youths"

H. PUBLICATIONS PROGRAM

For the first time since 1978, the POPLAB publication program is actively seeking suitable manuscripts, dealing with the techniques of demographic analysis, for publication. With the generous assistance of AID/W and the Tinker Foundation, POPLAB is publishing demographic manuscripts in English, Spanish and Portuguese this year.

Each of the three manuscripts currently in production belongs to a different series with the first, The Colombia National Household Survey: A Summary of Results, (scheduled for publication in early May) belonging to a new POPLAB "Summary Series." This particular summary is the first of a series containing the major findings of surveys in countries participating in the POPLAB program.

The other two publications in production are in foreign languages. The first, the Spanish translation of A Basic Demographic Questionnaire: Data Collection and Analysis in Sample Surveys, (Manual 7) and its Supplement are currently in press and are scheduled for publication in late May, while our first of three Portuguese manuscripts planned for future publication, entitled Unões Legais e Consensuais: Incidência e Fecundidade na América Latina (Incidence of Legal Marriages and Consensual Unions in Latin America: Its Relation to Fertility Rates) by Maria Helena F.T. Henriques is scheduled to go to press in April and should be ready for distribution by July 1, 1980.

Plans for the future include publication of the Broad Survey Questionnaires (still under revision) and other related handbooks which should appear in print 1980-81.

Approximately 785 POPLAB publications have been distributed to demographers, libraries, bookstores, students, researchers and international organizations world-wide since January 1980.

APPENDIX A

POPLAB STAFF

Birth and Death Data Collection Project

as of March 31, 1980

H. Bradley Wells, *Demographic Statistician, Director*

James R. Abernathy, *Statistician, Deputy Director*

Arjun L. Adlakha, *Demographer*

Carol Allison, *Computer Programmer*

Richard Bilsborrow, *Economist-Demographer*

Cynthia C. Coates, *Secretary*

Anne R. Cross, *Demographer*

Elva DeBoy, *Secretary*

Chris S. Durham, *Associate Director for Operations (Acting)*

William Kalsbeek, *Sampling Statistician*

Robert Krasowski, *Computer Systems Analyst*

Kathryn McCauley, *Secretary*

M. Nizamuddin, *Demographer*

Patricia Rupkalvis, *Office Manager (Acting)*

Jeremiah M. Sullivan, *Demographer*

Stephen Wilson, *Resident Advisor, Indonesia*

Oleh Wolowyna, *Demographer*

NOTES:

- a. Dr. Dennis Chao, under an NICHD postdoctoral fellowship, is providing technical assistance without salary cost to AID/DSPE-C-0025.
- b. When needed, students are utilized on an hourly basis to assist with the addressographing and mailing of publications.

APPENDIX B

FINANCIAL STATUS REPORT

"Birth and Death Data Collection"
AID/DSPE-C-0025

	<u>Total 5 Year Budget</u>	<u>Budget 10/1/78 9/30/81</u>	<u>Expended & Encumbered as of 3/31/80</u>	<u>Balance Available From 4/1/80 9/30/81</u>
Salaries	1,697,562	834,551	435,041	399,510
Consultants	60,000	30,025	13,139	16,886
Fringe Benefits	273,592	131,039	60,285	70,754
Overhead	712,976	350,512	190,081	160,431
Travel & Transportation	332,588	185,849	108,351 ^a	77,498
Allowances	46,160	27,448	17,644 ^b	9,804
Other Direct Costs	318,664	148,194	99,745	48,449
Equip., Supplies & Material	43,410	21,309	7,340	13,969
Subcontracts	2,070,000	1,105,073	650,656 ^c	454,417
	<u>5,554,952</u>	<u>2,834,000</u>	<u>1,582,282</u>	<u>1,251,718</u>

Source: UNC/CH Expenditure Summary Report as of March 31, 1980.

Notes:

- ^a Includes approximately \$14,820 travel scheduled and/or in process not reflected on Summary Report.
- ^b Includes \$16,305 advanced to Steve Wilson, Resident Advisor, Indonesia.
- ^c Includes the following subcontracts:

Bolivia	\$ 94,548
Colombia	140,000
Indonesia	143,246
Mexico	135,000
Somalia	113,700
RTI	<u>24,162</u>
	\$650,656

Prepared April 21, 1980

BIRTH AND DEATH DATA COLLECTION PLANNING SCHEDULE

Durham/ Revised April 22, 1980 Issue #6

Country	Jan.1980	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.1981	Feb.	Mar.
Indonesia		UNC visit for 1st rd. field work Workshop [2]			1st rd. field wk. [3]	Editing	Key-punching ← B. S. Visit →	← Tabulation analysis → [4]			← Report writing → [5]	UNC visit for rept. writing	Workshop		[6]
Mexico	UNC visit analysis prelim. data	UNC visit Seminar Final analysis [2]				← DIPLAF visit to UNC analysis → [3]		← Contract ends → [4]	Detailed report						
Columbia	Update sample	Develop quest. [2]	UNC visit Pretest [2]	Prepare manuals Develop tab.plans	Training	← Field work → [3]	UNC visit	← Data Process → [4]	UNC visit	← Analysis → [5]			← Prepare report → [6]		Contract Ends
Somalia	Contract starts	UNC visit pretest settled & nomad areas	Review question. 1st Sample visit [1]			UNC visit 2nd sampling [1]		UNC visit field wk. settled area → [2]		UNC visit data processing [3]	← Test computer programs Edit questionnaire → [4]			UNC visit field wk. nomad area [4]	
Ecuador				UNC visit [1]							UNC visit Dev. quest. [1]				
Korea			Contract visit [1]				UNC visit Survey & Sample Design Contract Starts [1]			UNC visit Questionnaire design [1]		UNC visit Manual preparation [1]			
Jordan					Contract visit [1]										[2]
Bolivia		UNC contract visit [1]		UNC visit Contract start [1]	Pilot Study [1]	CELADE visit UNC visit/ design final quest. Plan data Proc. [1]	← Field work → [1]	UNC visit [1]	CELADE visit [1]	← Data processing → [2]			← Analysis → [3]		
Kenya											UNC contract visit [2]				[3]
Uganda							UNC Assessment visit [1]								

NOTE: [2] Indicates sequence of scheduled progress and financial reports and month due.