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UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

LAC REGIONAL

# PROJECT PAPER

STATISTICS TRAININC CENTER

AID/LAC/P-229

Project Number:598-0636

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT

# PROJECT DATA SHEET

1. TRANSACTION CODE: A (A = Add, C = Change, D = Delete) — Amendment Number: — DOCUMENT CODE: 3

COUNTRY/ENTITY: LAC Regional

3. PROJECT NUMBER: 598-0636

4. BUREAU/OFFICE: Latin America and the Caribbean (LAC) 05

5. PROJECT TITLE (maximum 40 characters): LAC Statistics Training Center

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 09 DD 31 YY 90

7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4): A. Initial FY 85 B. Quarter 4 C. Final FY 88

8. COSTS ($000 OR EQUIVALENT $1 = )

| A. FUNDING SOURCE | FIRST FY 85 B. FX | C. L/C | D. Total | LIFE OF PROJECT E. FX | F. L/C | G. Total |
|---|---|---|---|---|---|---|
| AID Appropriated Total | 347 | | 347 | 1,000 | | 1,000 |
| (Grant) | (347) | ( ) | (347) | (1,000) | ( ) | ( ) |
| (Loan) | ( ) | ( ) | ( ) | ( ) | ( ) | ( ) |
| Other U.S. 1. | | | | | | |
| U.S. 2. | | | | | | |
| Host Country | 88 | | 88 | 3,641 | | 3,641 |
| Other Donor(s) | 126 | | 126 | 4,973 | | 4,973 |
| TOTALS → | 561 | | 561 | 9,614 | | 9,614 |

9. SCHEDULE OF AID FUNDING ($000)

| A. APPROPRIATION | B. PRIMARY PURPOSE CODE | C. PRIMARY TECH. CODE 1. Grant | 2. Loan | D. OBLIGATIONS TO DATE 1. Grant | 2. Loan | E. AMOUNT APPROVED THIS ACTION 1. Grant | 2. Loan | F. LIFE OF PROJECT 1. Grant | 2. Loan |
|---|---|---|---|---|---|---|---|---|---|
| (1) DEHRD | 660 | 710 | | | | 1,000 | | 1,000 | |
| (2) | | | | | | | | | |
| (3) | | | | | | | | | |
| (4) | | | | | | | | | |
| TOTALS → | | | | | | 1,000 | | 1,000 | |

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 620 | 700 | 720 | 870 | 660 | 670

11. SECONDARY PURPOSE CODE:

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code:

B. Amount:

13. PROJECT PURPOSE (maximum 480 characters)

To establish a training center at the Bureau of the Census to provide applied Spanish language training in statistics data processing and data analysis, tailored to the needs of Spanish speaking countries and Brazil.

14. SCHEDULED EVALUATIONS: Interim MM 11 YY 86 | MM 09 YY 87 — Final MM 11 YY 88

15. SOURCE/ORIGIN OF GOODS AND SERVICES: [X] 000 [ ] 941 [ ] Local [ ] Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a ____ page PP Amendment)

17. APPROVED BY

Signature: [signature]

Title: M. Butler
AA/LAC, Acting

Date Signed: MM 08 DD 13 YY 85

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON D C 20523

# PROJECT AUTHORIZATION

Name of Country: LAC Regional

Name of Project: Statistics Training Center Project

Number of Project: 598-0636

1. Pursuant to Section 105 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the LAC Regional Statistics Training Center project, involving planned obligations of not to exceed One Million United States Dollars (U.S. $1,000,000) in grant funds ("Grant") over a one-year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. The planned life of the project is three years from the date of initial obligation.

2. The project ("Project") will establish a training center at the U. S. Bureau of the Census to provide Spanish language training in statistics, data processing, and data analysis, aimed at public and private sector professionals from statistical offices in the Spanish-speaking LAC countries and Brazil.

3. The Agreement, which may be negotiated and executed by the officer to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Goods, Nationality of Services

Commodities financed by A.I.D. under the Grant shall have their source and origin in the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have the United States as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by the Grant shall be financed only on flag vessels of the United States, except as A.I.D. may otherwise agree in writing.

b. Condition Precedent to Disbursement

Prior to any disbursement, or the issuance of any commitment documents under the Agreement after September 30, 1987, the U.S Bureau of the Census shall furnish to A.I.D. for its review and approval, in form and substance satisfactory to A.I.D., an evaluation of the Project Training Program which shows a positive effective demand for the Program.

Malcolm Butler
Acting Assistant Administrator
Bureau for Latin America and the Caribbean

Aug. 13 1985
Date

Clearances:
LAC/DR:EZallman _____ Date 8/14/85
LAC/DR:ILevy _____ Date "
LAC/DR:PWhite _____ Date "
PPC/PDPR:JWeber _____ Date 8/12/85
LAC/DP:JClary _____ Date 8/13/85
GC/LAC:RMeighan RM Date 8/12/85

Drafter:GC/LAC:PJohnson:0897A:8/8/85

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Annexes

B. Recommendations

This project paper recommends that funding in the amount of $1 million be provided for the establishment of the LAC Statistics Training Center during the period FY 1985-FY 1989. These funds will support the development of a capability to provide applied Spanish-language training in statistics, data processing and data analysis that is tailored to the needs of the Spanish-speaking countries and Brazil.

C. Description of Project

The lack of accurate and timely statistics seriously hampers national planning efforts and the development and implementation of AID and other donor programs whose goal, like the goal of this project, is to improve the quality of life of the people of Latin America and the Caribbean. The current economic crisis faced by most LAC countries can in large part be traced to policies that were based on poor data or ineffective use of data in the policymaking process. In the agriculture sector, for example, many countries adopted policies that subsidized the prices of farm inputs. When combined with price controls on outputs, these policies resulted in diminished production, distortion of the mix of commodities produced, and an influx of people to urban areas in response to deterioration of rural life. Contributing heavily to the debt crisis were policies that overvalued local currencies, thus subsidizing the price of imports. These were followed by policies designed to compensate by imposing import licenses and currency controls.

In responding to serious fiscal problems, many governments have been handicapped by a lack of data upon which to make informed judgments regarding solutions. A common example of this is the decision to prune public investment programs in an effort to reduce the budget. In the absence of good data on the relative cost efficiencies and impacts of specific programs, programs often are cut across the board rather than selectively, thus delaying the productive benefits from a wide range of investments.

In accordance with its emphasis on policy reform, AID is trying to encourage countries to develop and implement market-oriented policies. Added to the political difficulties of such changes is the uncertainty about the long-term impacts of specific changes in policies or development programs. Improvements in the accuracy and timeliness of data will help to facilitate policy reform by encouraging policymakers to make difficult decisions. The existence of an adequate data base will also help AID and other donors to formulate and implement cost-effective programs. Thus, the improvement of national statistical systems will benefit AID on two levels; facilitating the agency-wide emphasis on policy dialogue by removing a key bottleneck in the policy reform process and increasing the effectiveness of sectoral projects through better data for planning and monitoring.

In recognition of the pivotal role that data play in the development process, this project will fund the creation of a training center that will provide

applied Spanish-language training in statistics and modern computer technologies. The region's public and private sector institutions do not have sufficient numbers of skilled technicians and managers to meet the demand for good data. Nor do they have the institutional capability to train staff on a regular basis. Existing LAC training facilities, including the universities, provide training that is academic or theoretical and is technologically outdated. Most good technical training programs that do exist, like the Census Bureau program, do not offer instruction in Spanish.

The new center will be operated by the Bureau of Census and headquartered at the Census Bureau training facility in Maryland. The official name of the center will be the Escuela de Estadistica Aplicada y Tecnicas de Computacion (School for Applied Statistics and Data Processing Technology). The Spanish acronym ESAYTEC will be used to refer to the center throughout this paper.

ESAYTEC will provide seminars, workshops, and formal courses lasting from several weeks to 7 months. The language of instruction will be Spanish and all training materials will be in Spanish. Training activities will be conducted at ESAYTEC headquarters in Washington and overseas on a subregional and national basis. Emphasis will be placed on providing applied training in the skill areas listed below.

-- Definition of data needs

-- Development of appropriate data collection methodologies

-- Applications of advanced computer hardware and software technology, especially microcomputers

-- Project evaluation and management information systems

-- Improvements in the timeliness, presentation, and dissemination of data to users

-- Techniques for data analysis

The target audience will include managers and data users, in addition to statisticians and data processing staff, and will be drawn from public and private sector agencies that produce or use statistical data. The overall effectiveness and relevance of the program will be maintained through (1) formal participant evaluations, (2) follow-up visits and consultations by teaching staff, (3) feedback from overseas training activities, (4) guidance received from donor organizations at an annual donor conference, and (5) feedback from the chief statisticians of the LAC countries at annual meetings of the Inter-American Statistical Conference.

D. Project Issues

Participants in the July 1984 PID review meeting identified a number of issues relating to overall project design, to the level of effective demand for this

type of training, and to the role of counterpart organizations in project implementation. Considerable progress has been made in resolving these issues on the basis of information collected and interviews conducted with mission and host government personnel in the course of project paper preparation. The factfinding visits made by BUCEN staff to eight Spanish-speaking countries provided most of the information used in resolving key project issues and in finalizing the project design. Five AID countries and three non-AID countries were visited, including Guatemala, Dominican Republic, Honduras, Bolivia, Peru, Venezuela, Argentina, and Uruguay.

The project issues and proposed resolution of each are summarized below. The statement of issues is quoted directly from the PID guidance letter.

1. Level of Effective Demand

Issue: "During the feasibility study projected to be carried out prior to the PP development the following points should be covered:

a. The demand study should isolate and identify the effective demand, i.e. those persons or organizations in the public and private sectors that are not only interested in the courses but are willing and able to pay for them.

b. The local USAID missions should be contacted to assure that they endorse the project and feel that it will have long-term demand. Would they consider providing scholarship funds for it?

c. Given that our target group is diverse and economic conditions are in a continuous state of flux, utmost care must be taken to assure that the courses offered address the interests and concerns of the potential participants."

Proposed Solution: It has proven difficult to measure actual effective demand at this early stage of project development. However, research done during project paper preparation has identified a level of probable demand that would be sufficient to support this project if it results in actual funding commitments.

There are three factors which, when taken together, would appear to justify the establishment of the proposed training center. These include (1) the generally favorable response to this project by USAID's and other donors contacted to date, (2) the magnitude of donor project funds that were identified as possible sources of fellowships over the next 4 years, and (3) the highly successful track record of the Census Bureau and the Bureau of Labor Statistics in operating similar programs that are sustained solely through fellowship funds from a variety of donors. Moreover, the level of demand for this training among the eight countries surveyed was far greater than expected.

Funding of fellowships was discussed with field representatives of donor organizations, including USAID's, and with officials at headquarters of the United Nations agencies, Inter-American Development Bank (IADB), Pan American Health Organization (PAHO), and the Organization of American States (OAS).

Although substantial interest in the project has been documented as a result of these contacts, donors were not willing to make specific funding commitments for a program that is still in the planning stage. Furthermore, it appears that such decisions are made centrally among the donors contacted. Thus, a top-down approach will be needed to secure financial support from the multilateral donors. Official statements of support already have been received from the United Nations Fund for Population Activities and the Pan American Health Organization (see letters of support in Annex C). It appears that a significant level of fellowship funding will be forthcoming from these and other multilateral donors.

Four of the five USAID's that were visited expressed strong interest in the training proposed under this project. Cables of support received from these missions appear in Annex D. USAID/Tegucigalpa has cabled a tentative commitment to provide $200,000 to $300,000 in fellowships annually over the next 4 years. The other USAID's visited were reluctant to specify levels of fellowship funding that would be available but did provide some useful information on likely sources of support within their programs.

Likely sources of fellowship funds totaling $6.9 million were identified among the AID and non-AID donors visited. This amount includes only those projects with statistical or data use components, or general-purpose training projects, that were specifically mentioned by donors.

A detailed analysis of effective demand is presented in Section III.B. The main conclusion of this analysis is that the effective demand for ESAYTEC will consist of four components which together will generate adequate fellowship funds. These include:

(1) the infusion of training funds through the Central and Latin American Scholarship Program (CLASP);

(2) funds from USAID technical assistance projects with statistical or data use components;

(3) fellowships from multilateral donors, particularly the United Nations Development Programme (UNDP) and other UN agencies, the IADB, PAHO and the OAS, and;

(4) support from the countries and the private sector.

In view of the difficulty of measuring effective demand at this point in time, it is proposed that effective demand be assessed as part of the mid-term project review, which is scheduled for late 1987. On the basis of information concerning fellowship support received to date, a decision will be made whether to continue the project as planned or to modify the project if effective demand is significantly less than the required level. The criteria to be used for this decision are discussed in detail in Section IV.C.

2. Duration of Training

Issue: "The optimum course length should be studied further. BUCEN's proposal deals primarily with 6 and 12-month courses. The 1-month courses offered have a lower prorated cost than the longer options."

Proposed Solution: The demand study identified strong demand from the target population for courses of 6 months or longer. While most donor organizations contacted prefer a mix of course lengths, some prefer short courses due to their lower cost. During the PID review a number of AID/W staff also expressed a preference for shorter courses because of cost and because of the difficulty recipient countries face in making key staff available to attend longer-term training.

In view of these considerations, this project paper is based on a program of short-term workshops and 7-month technical courses that will provide a balanced mix of course lengths. Apart from permitting maximum flexibility in meeting diverse training needs and donor preferences, this program will provide the longer-term intensive technical training that the Census Bureau, in its English-language program, has found to be so necessary for meaningful development of institutional capabilities.

3. Optimum Mix of Washington-based Versus Overseas Training

Issue: "It is understood that, while courses given in host countries are less expensive, courses given in Washington may have greater impact due to the availability of numerous agencies and experts involved in statistics. As both options have something to offer, BUCEN should attempt to identify the optimum mix of Washington-overseas classes."

Proposed Solution: The factfinding visits uncovered significant demand for overseas courses. This demand will be met by offering a number of seminars and workshops at the subregional and national level. The training offered in Washington will largely be confined to the short- and medium-term modular programs. It is anticipated that overseas courses will account for approximately half of the participants trained annually.

4. Cost and Need For Developing a New Curriculum

Issue: "Some questions were raised regarding the cost and necessity of developing an entirely new curriculum for this project. An option such as translating as much of the existing courses as possible to Spanish should be considered as it may result in lower developmental cost with no loss of impact."

Proposed Solution: As stated in the PID, much of the curriculum will be adapted directly from the existing English-language program, with translation of training materials into Spanish. The results of the fact-finding missions substantiate the original assumption that considerable modifications will be necessary to match the existing curriculum to the needs of the LAC countries. Moreover, since the Census Bureau's current English-language program offers mostly long-term training, course content and training materials will have to be modified in order to present the shorter-term training that LAC donors and governments want.

A central factor in the cost of curriculum development for ESAYTEC is the decision to use project funds to develop a large repertoire of courses that are completely documented. This approach is believed to be the most efficient use of project funds because it will minimize future developmental cost after project funding ends. Furthermore, with "stand-alone" documentation available, the cost of subsequent repetitions of courses will be reduced, thereby reducing tuition costs. Refined cost estimates for curriculum development are given in Section III.C.

5. Tuition Charges During First Year of Operation

Issue: "Please discuss why tuition is not being charged during the first year."

Proposed Solution: The failure to charge tuition during the first year would hinder the early evaluation of effective demand. Therefore, it has been decided that tuition will be charged for all training.

6. Role of Counterpart Agencies

Issue: "The issue of the OAS's input and status should be clarified .... The roles of the Bureau of Economic Analysis, the BLS, the universities, and the private sector should also be addressed. Every effort should be made to draw on existing expertise and facilities where possible."

Proposed Solution: The Organization of American States had originally been considered as a co-sponsoring agency. However, since the OAS has not made a commitment for financial support of the project, there are no plans at present for OAS participation. If the OAS provides fellowships it will be invited to send a representative to the annual Donor Conference, as will all contributing donor agencies.

A number of possible joint course offerings and other cooperation has been discussed with the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA). It is expected that a program will be offered when the ESAYTEC curriculum in economic statistics is introduced in FY 1988.

The National Center for Health Statistics (NCHS) has made a commitment to provide instructional support for a program in health statistics (see letter of support in Annex C). If similar support is received from PAHO, which is likely, a training program will be conducted jointly with these two organizations. The Government of Mexico and the Inter-American Institute for Cooperation on Agriculture have both officially expressed support for ESAYTEC and have offered to host training activities.

Collaborative efforts with universities and the private sector could be similar to those undertaken by the current English-language program at the Census Bureau. Joint degree programs are sponsored with several local universities. The donation by IBM Corporation of microcomputer hardware and software to the Census Bureau training program several years ago is one example of the type of U.S. private sector support that will be encouraged. The Latin American private sector is also expected to participate by sending employees for training at ESAYTEC.

## II. Project Background and Detailed Description

### A. Program Factors

#### Relationship of the Project to Recipient Country Priorities

The LAC governments have been, and continue to be, under heavy external pressures for reform of economic and fiscal policies. At the same time, a number of policymakers and top managers within national governments are beginning to appreciate that empirically-based decisionmaking could have avoided many of the misguided policies of the past. The statistical organizations of the LAC countries historically have had difficulty keeping pace with ever-growing demands for reliable, relevant and timely data. Over the past several years the demand for and appreciation of the usefulness of good data have increased dramatically as a result of the severe economic crisis facing the region. Indeed, the World Bank often requires improvements in a country's economic statistics as a condition for receiving structural adjustment loans.

One indication of the priority that countries attach to this project is the response to the survey of training needs conducted during the field visits. With results available from six of the countries visited, a total of 2347 professional staff are reported needing training from 1985 through 1988, or an average of 392 per year. The eagerness of respondents to take advantage of new training opportunities has undoubtedly resulted in somewhat inflated estimates of training needs. However, even if only half of the reported needs were funded, the numbers of participants would tax the capacity of the proposed training center. The questionnaire used to assess training needs is reproduced in Annex G.

Official expressions of support for this project have been received from Argentina, Bolivia, Dominican Republic, Ecuador, Guatemala, Honduras, Peru, Uruguay, and Venezuela. In addition, the Government of Panama recently requested support from USAID/Panama for ESAYTEC training. Copies of these communications are included in Annex C.

Relationship of the Project to AID Development Strategies

The primary objective of LAC Bureau programs over the next 5 years is to promote financial stabilization and reform of macroeconomic policies in order to help countries achieve rapid and sustained growth. This in turn implies the need for reliable and timely statistical data on several levels: for policy formulation and program management at the national level and for the development and implementation of programs by AID and other donor agencies. While the more efficient production of statistical data is not in itself a priority, it is a prerequisite for all priority programs because to ensure cost effectiveness they must be developed and carried out on the basis of accurate and timely data.

Policymakers and project managers are handicapped by the lack of data because it makes the comparison and critical evaluation of alternative courses of action very difficult. The FY 1985 CDSS prepared by USAID/Guatemala, for example, relies almost entirely on data from unofficial sources because very little usable data has been published by the Guatemalan Government. A preliminary study by the mission indicates that the data from the 1980 census, which were never published, are probably not salvageable. Similarly, USAID/Tegucigalpa and USAID/Lima report difficulties in planning and implementing sector programs because of the lack of up-to-date census and survey data. Thus, there is a clear need for the kind of training to be provided by this program.

The relationship of this project to other LAC Bureau priorities is summarized below.

a. Technology Transfer

The promotion of technology transfer is a major rationale for the establishment of ESAYTEC. Dissemination of the knowledge and technical skills needed to support advanced computer hardware and software is a central focus of the program. This is the area of greatest demand for training and will be the first curriculum to be developed. Appropriate management technologies and advanced statistical and data collection methodologies pioneered by the Census Bureau also will be transferred by ESAYTEC.

b. Institutional Development

This project will foster institutional development by helping to form the nucleus of trained mid-level technicians and managers that statistical organizations need to function properly. Graduates of the program will acquire skills that they will transfer to others within their organizations, thus producing an important multiplier effect. By providing applied training in Spanish, ESAYTEC will fill a serious gap in staff development opportunities currently available to LAC statistical organizations.

c. Private Sector Issues

The contribution that this project makes to improvements in the quality and accessibility of statistical data will benefit the private sector. Private firms need reliable economic and demographic data to monitor market trends, to

evaluate investment alternatives, and to identify opportunities for growth. Increased use of microcomputers will greatly improve access by private sector organizations to data produced by government agencies.

Direct private sector participation in this project will take three forms; U.S. firms will be asked to provide fellowship funding, or teaching assistance, and recipient country businesses will send employees for training. The IBM Corporation already has contributed microcomputer hardware and software to the current Census Bureau program. Efforts will be made to obtain this type of private sector support for ESAYTEC. During the demand study it was determined that the Association of American Chambers of Commerce in Latin America will serve as a useful channel for publicizing ESAYTEC training opportunities among private sector firms.

d. Strengthening Relationships With Advanced LAC Countries

This project will be especially useful in providing the advanced countries with access to technical skills development and computer technology not currently available elsewhere. Three of these countries, Argentina, Uruguay and Venezuela, were visited during the demand study. The response to the project was extremely positive. A large number of statistical organization staff in these countries need training, particularly short-term programs in computer technology and microcomputer applications.

B. Perceived Problems

1. Lack of Training Opportunities and Increasing Demand for Good Data

The difficulties historically experienced by the LAC countries in the efficient production and effective use of statistics have been exacerbated by two phenomena occurring simultaneously: a longstanding and continuing lack of opportunities for applied training of professional staff and, more recently, accelerated demand for accurate and timely data by policymakers and other data users. This situation, together with high staff turnover, has produced a pent-up demand for the kind of training to be provided by ESAYTEC. This was documented by the demand study. As mentioned previously, the eight countries visited reported a total of 2347 professionals needing training in applied statistics, data processing, and data analysis over the 4-year period 1985-1988.

These findings are consistent with the conclusions reached in development of the LAC Training Initiatives project. That project paper states:

> The demand for short- and long-term U.S. training in LAC countries has always exceeded the resources available to finance participants.... much of the demand is simply never met, leaving development projects and agencies struggling to respond to massive, complex development problems without the trained manpower needed to develop state-of-the-art solutions.

Opportunities for applied training in the Spanish language are very limited, especially in the area of computer technologies and applied statistics. Available training in Latin America generally suffers from a lack of applied orientation and outdated methodologies and technology. While existing training facilities in the U.S. may provide practical, up-to-date training, they are usually conducted in English only. During project paper preparation a wide range of existing training opportunities were reviewed in order to determine whether the proposed program would duplicate programs currently available. The results of this review are summarized below by type of training institution.

a. International Organizations

The Centro Interamericano de Ensenanza de Estadistica (CIENES), operated by the OAS, offers academically oriented courses that do not address current, real-life problems in the region. About one-third of the persons trained by CIENES in 1983 were university students; less than 5 percent were from national statistical organizations. The OAS recently ordered CIENES to phase out its training program and concentrate on providing technical assistance.

The other regional organization involved in statistical training is the Centro Latinoamericano de Demografia (CELADE), which is funded largely by the United Nations Fund for Population Activities. CELADE only provides training in population studies, demographic analysis and related computer applications. The proposed center will offer training in key areas not covered by CELADE--the collection of demographic data and associated statistical methods--in addition to full coverage of economic statistics, agriculture statistics, and data processing technology. Thus, the proposed program will complement the training given by CELADE.

b. Universities

There are two principal reasons why universities in the U.S. and Latin America do not provide the type of applied statistical and data processing training proposed under this project. First is the fact that universities are primarily concerned with education as opposed to training. University programs tend to focus on theoretical concepts and general subject matter knowledge that is difficult to apply to real-life situations. There are a number of exceptions to this in the U.S. but few in Latin America.

The second and perhaps more important reason why this type of training is not found in universities is that the skills required to produce government statistics constitute a fairly specialized area of knowledge. Until very recently, most universities in the the U.S. did not even have a department of statistics. Statistics was usually part of the mathematics or accounting departments. This is still the case in the vast majority of Latin American universities. Of those universities in the U.S. and Latin America that do have separate statistics departments, very few have courses in survey and census design and operations. Courses in sampling are usually very theoretical and treat survey-census applications very superficially or not at all. It is interesting to note that the U.S. Census Bureau is launching an in-house training program designed to provide recently hired university graduates with basic skills in survey-census methodology and statistics.

The same sort of problem is found in university programs in the data processing area. They are geared toward generic business-oriented applications which simply do not provide the knowledge and skills needed to provide computing services to national statistical programs. Graduates of these programs may know the common programming languages but have no exposure to the unique applications and data problems associated with survey-census processing. Thus, while university programs in statistics and data processing may provide some useful skills for entry-level employees, they are inappropriate for the specialized and more advanced skills that LAC statistical and planning organizations need.

c. U.S. Government

In the U.S., programs at BLS and BEA offer training only in specialized areas of statistics. Simultaneous Spanish translation is available at BLS for a high additional cost. While these agencies offer valuable training opportunities in their respective areas of expertise, they do not support the development of the broad range of skills and technologies required to solve the problems faced by LAC statistical and data user organizations. The current program at the Census Bureau offers a diverse, applied curriculum; however, all instruction is in the English language.

d. U.S. Private Sector

The major U.S. computer vendors in Latin America are IBM, Wang, and NCR. All offer some type of Spanish-language training to users. IBM is believed to be the only company that offers a regularly scheduled program of courses each year. Not surprisingly, vendors tend to provide training that is oriented only toward the operation and interface with equipment they sell. Generic training of the type needed by a systems analyst or applications programmer is not available. Furthermore, training given by vendors is oriented toward business applications which, as mentioned previously, are different from those needed in statistical organizations.

A variety of U.S. consulting firms provide training in information systems, microcomputer applications, and in statistics. Apart from the fact that these courses are conducted in English, they share the same business orientation that vendors have.

e. Puerto Rico

The availability of this kind of training in Puerto Rico has been investigated. There are several universities in Puerto Rico that teach Spanish-language courses in data processing and statistics. The most extensive offerings are at the University of Puerto Rico. However, according to a number of graduates of the school who are now employed by the Census Bureau, the teaching is generally theoretical. The computer science program is under the school of business and teaches business applications.

The Government of Puerto Rico collects and uses statistics on a regular basis. However, the only training it does is small-scale in-service courses for field interviewers and office clerical staff.

2. Areas of Specific Deficiencies

The statistical system in the typical LAC country is characterized by four major deficiencies:

a. Inefficiency and poor management of the data production process;

b. Weak linkages between data users and data producers;

c. Limited ability to properly interpret and utilize data in the decision-making process and;

d. Failure to fully exploit new technologies to improve the efficiency and effectiveness of the data generation process.

These problems were found in varying degrees in all the countries visited during the feasibility study. A brief discription of these problem areas and how ESAYTEC will contribute to their solution is given below.

Inefficiency and Poor Management of the Data Production Process

Problem:

* Poorly trained technical staff and weak management of data collection and processing, resulting in low quality data.

* Due to improper quality control, errors often are not discovered until it is too late to correct them. Computer processing bogs down and the publication of data is seriously delayed, or the data are not released at all.

* Lack of coordination between the data collection staff and the computer staff is a common problem that contributes to overall delays and errors.

How the Problem Will be Addressed:

* Emphasis on management training of mid-level staff.

* Training for technicians and managers in communication and interface skills.

* Technical training in data collection, processing and analysis, and quality control skills.

Weak Linkages Between Data Users and Data Producers

Problem:

* Often little or no involvement of data users in the data production process; the data collected usually are not relevant to their needs or are not available in the desired format.

* Statistical organizations usually fail to invite and facilitate user participation. Users often do not understand the need for their involvement or how to determine data requirements and communicate them to the statisticians.

* Statistical agencies generally have a very weak or nonexistent program of user services and user outreach. Consequently data users have difficulty accessing data. Data that are available are in many cases difficult to use because insufficient information has been provided on how they were collected and how to interpret them.

How Problem Will Be Addressed:

* Training for data users in how to define data needs, how to communicate these and other analytical requirements to statisticians.

* Workshops for managers on how to develop a user service program and regular data user conferences.

* Training in microcomputer applications to facilitate user access to data.

* Training in proper documentation of data accuracy and the methods used to collect and process data.

Limited Ability to Properly Interpret and Utilize Data in Decisionmaking

Problem:

* Much of the data produced is not used because of a lack of competent analysts.

* Data needs and desired outputs often are poorly defined and the funds spent on the survey or census are wasted because the results are not useable.

* The fundamental cost of this problem is not easily measured -- the cost of bad policy decisions based on no data or on improperly analyzed data due to the lack of competent analysts.

How Problem Will Be Addressed:

* Training of data users in statistics and data analysis, including how to define data needs.

* Hands-on training in mainframe and microcomputer software for data presentation, access, and analysis.

Failure to Fully Exploit New Technology

Problem:

* Lack of skilled staff to take full advantage of recent advances in computer technology.

* Existing mainframe computers commonly are used inefficiently.

* Many potentially useful applications are not attempted due to the shortage of programmers or because users are not aware of the computer's capability or what software is available.

How Problem Will Be Addressed:

* Priority on training programmers and systems analysts, thus expanding the pool of skilled personnel.

* Training in microcomputers will partially alleviate chronic shortages of programmers since non-programmers can perform many of the tasks normally assigned to the central data processing staff.

* Development of microcomputer capability will greatly expand the application of computer technology to presentation of data, access and analysis of data, and the publication of results.

## C. Project Purpose and Expected Achievements

### 1. Project Goal and Purpose

The goal of this project is to contribute to improvements in the quality, timeliness, and relevance of statistical data in the LAC countries by establishing a capability to effectively train statisticians and data processing staff. In addition to this technical training, data users and managers will be trained in how and why statistical data should be used in the policymaking process and in program management.

The upward mobility of this trained corps will have the spread effect of producing leaders and decisionmakers with personal experience in data collection, processing, and analysis. As this human resource infrastructure is strengthened over time, the effectiveness of the decisionmaking process at all levels will improve as it becomes more empirically-based.

The purpose of this project is to (1) establish a capability to provide strongly applied training which incorporates the use of the latest computer technologies and statistical methods; (2) increase the number of trained personnel in LAC public and private sector organizations that produce and use statistical data; and (3) strengthen the capacity of LAC institutions to provide training of this type.

2. Project Outputs

Project funds will be used to support program development over a 5-year period from FY 1986 through late FY 1990. Four project outputs can be identified:

a. Development of five workshops and seminars, and five 7-month modular courses;

b. Implementation of training (approximately 623 persons trained during 5 years);

c. Improved capability of LAC statistical organizations to provide in-house training in applied statistics and data processing technologies and;

d. Creation of a focal point for coordination of regional training in applied statistics and data processing.

Each of these outputs is described in detail below.

a. Course Development and Implementation of Training

Two types of courses will be developed; short-term seminars and workshops of 2 to 4 weeks duration and medium-term modular courses. The medium-term courses will consist of modules lasting either 2 or 3 months, corresponding to introductory, intermediate and advanced material. The modules can be taken individually or linked together to form programs lasting 2, 3, 5 or 7 months. This format was chosen because it gives maximum flexibility in accommodating participants with different levels of experience and also permits programs of short duration to be arranged.

Course development will consist of the following steps:

(1) Needs analysis and development of instructional objectives.

(2) Preparation of course plan, including selection of media and listing training materials required.

(3) Review of relevant training materials used in the English-language program.

(4) Inventory of materials available in Spanish and estimation of translation requirements.

(5) Design of instruction, including lectures, case studies, simulations, and exercises.

(6) Review, testing and finalizing the course.

(7) Translation of materials into Spanish.

This procedure will be essentially the same for the short courses and the modular courses, however, the modular courses will require some preliminary curriculum design work.

The content of the workshops and courses that will be developed is discussed in Section II.D and details on the costs associated with course development are given in Section III.C. Table 1 below summarizes the number and type of courses that will be developed.

TABLE 1. NUMBER OF COURSES DEVELOPED AND GIVEN[1]: FY 1986 to FY 1990

| Item | Total FY 1986-FY 1990 | Fiscal Year 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| Courses Developed | | | | | | |
| Seminars/Workshops | 5 | 2 | 1 | 1 | 1 | 0 |
| 7-Month Modular Courses | 5 | 1 | 2 | 1 | 1 | 0 |
| Courses Given Overseas | | | | | | |
| Seminars/Workshops | 12 | 2 | 2 | 2 | 3 | 3 |
| Courses Given in Washington | | | | | | |
| Seminars/Workshops | 9 | 1 | 2 | 2 | 2 | 2 |
| 7-Month Modular Courses | 13 | 0 | 1 | 3 | 4 | 5 |

[1] The same course may be given more than once. Therefore, the number given may be greater than the number developed to date.

Overseas activities will include seminars and workshops conducted at the subregional or national level and technical follow-up visits and consultations by training staff. Seminars and workshops will be conducted at the invitation of a particular country, with funding from donor organizations to cover the cost of preparing for and giving the training. This training will be designed to meet the needs of a specific country, group of countries, ministry, or development project. Staff follow-up activities will be conducted in conjunction with seminars and workshops to minimize cost. This outreach program will give staff the chance to help former participants apply what they have learned to their jobs and also will provide valuable feedback on the effectiveness of the training program.

Training given at ESAYTEC headquarters in Washington will consist largely of the 7-month modular programs. Workshops and seminars that require special computer or other facilities will be conducted in Washington as well. Table 2 below gives a summary of the level of training to be carried out in Washington

TABLE 2. IMPLEMENTATION OF TRAINING ACTIVITIES: FY 1986 to FY 1990

| Item | Total FY 1986-FY 1990 | Fiscal Year 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| Total, All Training | | | | | | |
| Number of Courses Given | 34 | 3 | 5 | 7 | 9 | 10 |
| Number of Participants Trained | 623 | 51 | 88 | 130 | 168 | 186 |
| Participant-Months of Training | 1917 | 38 | 166 | 435 | 576 | 702 |
| Overseas Seminars/Workshops | | | | | | |
| Number Given | 12 | 2 | 2 | 2 | 3 | 3 |
| Number of Participants Trained | 236 | 36 | 40 | 40 | 60 | 60 |
| Participant-Months of Training[1] | 177 | 27 | 30 | 30 | 45 | 45 |
| Washington-Based Seminars/Workshops | | | | | | |
| Number Given | 9 | 1 | 2 | 2 | 2 | 2 |
| Number of Participants Trained | 155 | 15 | 32 | 36 | 36 | 36 |
| Participant-Months of Training[1] | 116 | 11 | 24 | 27 | 27 | 27 |
| Washington-Based Modular Courses | | | | | | |
| Number Given | 13 | 0 | 1 | 3 | 4 | 5 |
| Number of Participants Trained | 232 | 0 | 16 | 54 | 72 | 90 |
| Participant-Months of Training | 1624 | 0 | 112 | 378 | 504 | 630 |

[1] This assumes that workshops and seminars will average 3 weeks in duration.

b. Strengthening of LAC Training Capabilities

There are three ways in which this project will contribute to strengthening the capability of LAC statistical organizations to provide in-house training in applied statistics and data processing technology:

Providing technical training which will develop a pool of skilled staff who can train others after returning home;

Providing a "train the trainer" course to participants attending module 3 of the 7-month courses and;

Participation of LAC statisticians and other specialists in co-teaching of overseas workshops.

Furthermore, this project will provide training specifically designed for institution-building, if requested. The Government of Bolivia, for example, recently expressed interest in undertaking a comprehensive program of training with the objective of developing an in-country training capability. Staff trained at ESAYTEC would return home and teach some of the courses they studied in the U.S. Over a period of time, in-country capability would be expanded to the point that little or no outside training would be necessary. The possibility of launching this type of program will be explored with the Bolivians after the project gets underway.

c. Focal Point for Coordination of Regional Training in Applied Statistics and Data Processing

The establishment of ESAYTEC will provide the kind of focal point for regional statistical training that currently does not exist. Through its training activities and ongoing contacts with donor organizations, the center will promote communication on several levels; between countries so that common solutions can be shared and problems identified and prioritized; between donors and recipients to identify training needs; and among donor agencies to improve coordination of efforts.

The forthcoming round of 1990 censuses of population is an excellent opportunity for ESAYTEC to serve as a vehicle for coordination of training, technical assistance, and standardization of technical procedures. In summary, the creation of ESAYTEC will provide a much-needed stimulus for increasing the amount of resources devoted to statistical training, while also promoting more efficient use of available resources.

## D. Project Outline

### 1. Target Audience

In accordance with the problem analysis presented earlier, ESAYTEC training will be aimed at three categories of professionals:

* Mid-level and senior technicians responsible for collecting and processing data;

* Managers of these activities and;

* Data users.

Data users include persons who are responsible for analyzing statistical data; using data in planning, managing or evaluating programs; or doing actual policymaking.

The population from which trainees will be drawn includes a broad range of organizations in the public and private sectors. In most LAC countries the collection and use of government statistics is decentralized. In all eight countries surveyed during the demand study the national statistical office accounts for less than half of the total number of persons working in the

production and use of statistics in the national government. Thus, participants will be drawn from ministries of agriculture, economy, labor, finance, planning, health, education, etc. Central banks also will be a source of participants.

The field visits found that the universities might be another important source of participants, with potentially large impacts in terms of the program's spread effect. Universities in Peru, Venezuela and Honduras were contacted during the demand study and filled in training needs questionnaires. They were very interested in training faculty members in microcomputer applications and in data analysis techniques.

Another potential source of participants is the private sector, including financial institutions, commercial enterprises, and chambers of commerce. Private sector contacts during the demand study included a small consulting firm in Honduras, the Bolivian Chamber of Commerce, and the American Chamber of Commerce in the Dominican Republic. The latter organization could be very useful in establishing contact with private firms that might benefit from the training offered by ESAYTEC. An active effort will be required to encourage private sector participation because the private sector is so dispersed and, in countries like Honduras, is very small-scale.

2. Curriculum

a. Practical Application

All aspects of the program, including course content, selection of staff, and the length and format of training activities, will stress practical application of skills. Courses will emphasize real-life examples, field exercises where appropriate, use of equipment, microcomputers, and software packages, and the actual production of tables, reports, etc.

The training program will be carefully designed to ensure that what is learned is actually used after participants return home. In classroom laboratories and exercises participants will be required to begin applying what they have learned to problems on their job. Post-training follow-up by teaching staff will complement and encourage this process.

b. Program Relevance

An ongoing effort will be made to keep the center's programs relevant to the changing needs of the LAC countries. Curricula and course content will be continually updated on the basis of the following sources of information:

* Evaluations by participants during and after training;

* Feedback obtained in subregional and national seminars and workshops;

* Experience of staff in conducting follow-up technical assistance visits and consultations with returned participants;

* Recommendations and comments from donors through the annual Donor Conference and other contacts and;

* Recommendations from the chief statisticians of the hemisphere at annual meetings of the Inter-American Statistical Conference.

The content of the 7-month modular courses will be updated annually. Workshop topics will be changed as necessary to meet the special needs of a group of countries, a single country, or a ministry or development project.

c. Content of Training

A tentative course implementation schedule appears in Section IV.B.

Below is a list of the workshops and modular courses that will be developed. Course descriptions for some of these appear in Annex E.

Seminars and Workshops:

Effective Data User-Producer Interface

Design and Implementation of Health Information Systems

Planning and Organizing a Population Census

Use of Data for Social and Economic Policymaking

Microcomputer Applications for Statistical Organizations

7-Month Modular Courses:

Sampling and Survey Methods

Population Statistics and Demographic Analysis

Computer Data Systems

Economic Development Statistics

Food and Agriculture Statistics

d. Duration of Training

In view of the findings of the demand study, the program will be designed to provide maximum flexibility with respect to duration and content. The short-term offerings will include seminars and workshops averaging 3 weeks in duration. Additionally, it will be possible for busy managers or other critical staff who cannot be spared for long periods of time to attend a 2 or 3-month module of a 7-month course. These courses will each consist of three modules; a 3-month module followed by two 2-month modules.

In-depth technical training for mid- and senior-level professionals will be available through the modular courses. It will be possible to combine modules to suit participants' backround and time constraints. For example, data processing staff with several years experience could take Module 2 of the Computer Data Systems course for a 2-month intermediate-level program (see the curriculum description in Annex E). Senior systems analysts and computer department heads may take Module 3, a 2-month program covering management of data processing operations and personnel.

3. Instructional Staff

The Census Bureau will be responsible for staff recruitment. Every effort will be made to take advantage of the unique instructional resources that exist in the Washington area. Full-time instructors will be selected based on their technical expertise, Spanish proficiency, and practical work experience in the LAC countries. Guest lecturers and special programs will be arranged through the numerous Federal government agencies, international organizations, and private firms in the area. When possible, resource people from Central Banks, Ministries of Planning, and other LAC government organizations will be invited to give guest lectures for Washington-based and in-country training events.

An attempt will be made to involve the U.S. private sector in the instructional program. The IBM Corporation, for example, has expressed interest in contributing instructional staff. It is hoped that similar kinds of participation can be arranged with other computer hardware and software firms. One possibility would be to have vendors provide technical staff to demonstrate and guide participants in the use of their products as part of courses and workshops.

In order to reduce the operating costs of the new program, administrative and clerical staff will be shared with the existing program to the extent possible. This will help to minimize the number of new positions to be staffed. Similarly, extensive use of part-time instructors will reduce the number of full-time instructional staff needed.

4. Location and Facilities

The center will be housed in the Census Bureau's international training facility in Marlow Heights, Maryland. Computer equipment and some classroom space will be shared with the current English-language program. Simultaneous translation equipment will be purchased to accommodate visiting speakers who are not fluent in Spanish. A library of Spanish-language technical references and periodicals will be assembled for use of the participants.

Living accommodations are available at several nearby apartment complexes, which are connected to the training center by shuttle bus service. English classes will be available to participants to give them basic language skills.

5. Program Fees

Tuition will be charged for all training with the objective of achieving a self-sustaining program by FY 1990. With this in mind, the monthly fee for modular courses, which will begin in FY 1987, will be $960. Tuition charges for seminars and workshops conducted in Washington will be as follows: 2 weeks, $1500; 3 weeks, $2250; and 4 weeks, $3000.

The costs of overseas training activities will be covered by a flat fee charged to the agency sponsoring the workshop. If there are several sponsors, a pro rata participant fee will be charged. These fees may be similar to those charged for Washington-based training, depending on the number of participants attending. For example, the estimated cost for staff preparation, teaching and travel for a 3-week workshop in FY 86 is $48,000. Assuming 20 participants, this would result in an average fee of $2,400 per participant. This figure is used as a basis for comparing the total costs of different types of workshops in Table 3 below.

Table 3. ESTIMATED TRAINING COSTS PER PARTICIPANT BY TYPE OF TRAINING AND COST CATEGORY

| Type of Training | Total Cost | Tuition | Airfare | Per Diem | Other [1] |
|---|---|---|---|---|---|
| Overseas Workshop (given in participant's country) | 2400 | 2400 | - | - | - |
| Overseas Workshop (given in other country) | 4725 | 2400 | 750 | 1575 | - |
| Washington Workshop | 4975 | 2250 | 1000 | 1575 | 150 |
| 7-Month Modular Course (FY 1987) | 15780 | 6720 | 1000 | 7200 | 860 |

[1] Other training costs include insurance and purchase and shipping of books. Program-related travel in the U.S. also is included for the 7-month course.

6. Role of Donor Organizations

Beginning in the second year of the project, organizations providing fellowships will be invited to send representatives to an annual conference of donors. The Donor Conference will be organized by the Census Bureau with the following purpose:

* Provide a mechanism for helping to ensure that ESAYTEC training is meeting the needs of the region;

* Stimulate donor interest and support for ESAYTEC and for development of statistics and data processing throughout the region and;

* Serve as a medium for communication, information exchange, and coordination among donors in the area of statistics and data processing.

The conference will give donors the opportunity to review the progress of the program and to make recommendations concerning training priorities. Census Bureau staff will take donor priorities and recommendations into account when deciding on program content and objectives.

7. Role of Other Counterparts

Meetings have been held with staff of the National Center for Health Statistics, the Bureau of Labor Statistics and the Bureau of Economic Analysis regarding areas of possible collaboration. The NCHS has already made a formal commitment to provide instructional support for a training program in health statistics. A series of discussions involving Census, NCHS and PAHO have been held concerning the possibility of a joint undertaking.

Several possibilities were discussed with the BLS. These include joint Washington-based programs either on a formal or adhoc basis, exchange of instructors for guest lectures, and joint sponsorship of overseas workshops and seminars. A factor that would limit the extent of this collaboration is the availability of Spanish-speaking staff in BLS, although BLS does have some capability now. It should be feasible to offer some joint programs once courses in economic statistics are underway at ESAYTEC in FY 1988. To the extent possible, these will be timed to coincide with BLS seminars that have simultaneous Spanish translation available.

Due to the small size of the BEA program (only one full-time staff member), the possibilities for collaboration are limited. As a minimum, BEA staff could conduct guest lectures at ESAYTEC with simultaneous translation. The expertise possessed by BEA in the compilation of national accounts data would be a valuable complement to the proposed economic statistics curriculum.

As mentioned earlier, the experience of the Census Bureau English-language program offers some examples and precedents for collaboration with two other types of institutions under this project -- the private sector and the university community. The English-language program has longstanding joint

master's degree programs with several local universities that enhance the effectiveness of the training provided. Language would be a major obstacle to arranging similar collaboration for ESAYTEC. However, there may be some universities in Puerto Rico which could provide instruction, perhaps in conjunction with a field exercise in survey-taking. These possibilities will be explored.

## III. Project Analyses

### A. Alternative Project Designs

A number of alternatives involving the same type of training have been considered. They include the following:

--Strengthening of existing regional training centers or universities;

--Creation of a new center located in the region;

--Development of country-level training capabilities;

--Simultaneous translation of the existing English-language program at the Census Bureau; and

--Translation of existing training materials into Spanish.

The first three alternatives all involve development of training capabilities in the region rather than establishing a new center located in the U.S. These options were discussed in the PID and are briefly reviewed here. During the PID review it was decided that the last two alternatives, involving translation of the existing Census Bureau program into Spanish, should be explored further. These are discussed separately in Sections A.2 and A.3.

#### 1. Development of LAC-Based Training Capabilities

An alternative to the investment of resources being proposed under this project would be to fund the strengthening of existing regional training centers or establishing a new regional center based in the region rather than in the U.S. As mentioned earlier, CIENES and CELADE are the only existing programs providing statistics and data processing training. The CIENES program is phasing out training activities and will concentrate on providing technical assistance. The CELADE Program would be an inappropriate basis for developing the type of training envisioned since it is restricted to demographic statistics and analysis. Furthermore, CELADE is an agency of the U.N.'s Economic Commission for Latin America, which would present bureaucratic obstacles to extensive U.S. participation.

Investing resources to strengthen existing programs or to establish a new training center located in the region are alternatives which share a common disadvantage; the extent to which U.S. methods and technologies could be transferred would be limited. A center located in Washington would enjoy the ready availability of instructional resources which exist in the Washington area, including lectures and demonstrations by technical experts from

government, multilateral organizatons, and private sector vendors of computer hardware and software. Another important advantage which would be lost if the program were located in the region is the opportunity to expose participants to U.S. society and culture. It is felt that these advantages outweigh the disadvantages of the relatively high airfare and per diem costs necessitated by the center's location in Washington.

Another alternative to consider is to use these resources to develop country-level statistical training capabilities. Limited access to U.S. methods and technologies would be an obvious drawback in this case as well. However, the major problem with this option is that it would be an inefficient use of resources. There would be considerable duplication of effort and available funding and instructional expertise would be spread too thin. The type of training needed by the LAC countries is relatively sophisticated and technology intensive. This fact favors a training program which is centralized and has easy access to the most advanced instructional, methodological, and technological resources.

The strengthening of university programs in this area is another alternative to be considered. This approach would entail some of the same disadvantages discussed above, namely, the difficulty of transferring advanced technology and the duplication of effort if more than one institution were involved. More important, perhaps, is the fact that LAC universities historically have been unable to provide applied training, particularly in the area of statistics and data processing. Indeed, on the basis of contacts made during the demand study it appears that LAC universities will look to ESAYTEC for training their faculties in the latest computer and statistical technologies. Universities in four countries have experessed serious interest in sending faculty for training at ESAYTEC.

2. Feasibility of Translating Existing Census Bureau Program Into Spanish

The PID review guidance letter directed that simultaneous translation of the Census Bureau English-language program be explored further as a possible alternative to the proposed project design. The PID guidance letter also suggested that the experience of the BLS program be studied since it offers simultaneous translation into Spanish and the training content is similar to what ESAYTEC would provide. The BLS makes Spanish translation available upon special request for an additional program fee of $850 per month. Over the last 5 years, these services have been provided to about 12 percent of the participants attending the program. Translation is done by an in-house GS-12 translator. Most training materials are available in English only.

Simultaneous translation on a small scale makes sense for a program like BLS because it provides flexibility and broadens the potential audience. However, this alternative would not be feasible for this project for two reasons: (1) simultaneous translation is not cost-efficient compared to the proposed design and (2) unlike the BLS program, ESAYTEC is designed specifically for the LAC countries and therefore requires training targeted to their needs. There are, of course, variations among the LAC countries; however, with

respect to overall level of development and the kinds of technical problems they face, they are significantly different as a group from the rest of the developing world. These differences are discussed in detail in Section A.3 below.

For this reason a related alternative, that of simply translating the existing course materials to Spanish, would also result in a considerable loss of impact compared to the proposed design. The current program runs for 11 months. This factor alone will necessitate modifications to course content and training materials in order to present the shorter-term training that appears to be needed. It also should be noted that a large portion of the existing training materials will in fact be translated into Spanish with little modification, especially in the computer area.

Development of a new curriculum aimed at the LAC countries, as proposed here, is more cost efficient than any alternative involving simultaneous translation. At the proposed level of training, it is estimated that six full-time translators would be needed. This assumes that an average of three classes would be conducted simultaneously, each requiring two translators working in shifts. The annual cost would be approximately $300,000 or $500 per participant-month of training. Thus the proposed investment of $1 million to develop a Spanish-language program would be amortized in about 4 years as compared to recurring cost of simultaneous translation.

3. Need for Training Designed for the LAC Countries

The level of statistical development of the LAC countries mirrors their overall level of social and economic development. In comparison to most developing countries, the LAC countries are fairly advanced in terms of the technical sophistication of statistical operations and the volume of government statistics that are produced on a regular basis. The LAC countries also have a pool of human resources that is better educated and, therefore, generally more receptive to the use of modern technologies and methods of organization.

In contrast to most African and many Asian countries, the Latin American countries have established a data collection capability supported by sizable mainframe computing capabilities. Thus, their training needs are more advanced, focusing on strengthening existing capabilities, rather than the establishment of statistical programs. The training needs of the LAC countries lie in four principal areas: (1) updating computer hardware and software technologies; (2) applications of current statistical methodologies, including sampling and data analysis techniques; (3) quality control and management; and (4) overall coordination of data collection activities to eliminate gaps and duplication. The existing English-language program at the Census Bureau does not give adequate coverage to these areas because is it geared to the middle to lower level of development that characterizes the Asian and African countries that it serves. This project will create a training program that is aimed at the more advanced needs of the LAC countries.

Several examples will illustrate the fact that the level of statistical development, and thus the training needs, of the LAC countries differ substantially from other regions of the developing world. The Census Bureau recently completed a study of the 1980 round of censuses of population conducted in the developing countries. In order to compare the overall census-taking capability among different regions of the world, the average lag time between the census and the release of detailed national data was calculated. In the U.S., the results were available 24 months after the census date. For Latin America the average time lag was 36 months, compared to 46 for Asia and 58 for Africa.

These figures are very good indicators of overall statistical development. A national census of population requires the same skills as do surveys and, since most countries give the census full political and financial support, it is a good test of technical and organizational capacity. Although these figures do not measure the quality of the data collected, they do show a relatively stronger institutional capability in the LAC countries. Much of the difference between Latin America and the rest of the developing world is due to more advanced data processing capabilities. The 1980 census was the first or only the second census conducted in many African countries. Most Latin American countries have conducted censuses fairly regularly for over 100 years.

A Census Bureau study of industrial statistics in developing countries completed last year provides another example of differing levels of statistical development. A questionnaire on statistical programs and capabilities was completed by 121 countries. In addition, a number of countries provided copies of questionnaires, manuals and other technical documntation used in their industrial censuses and surveys. An analysis of the results showed that the Latin American countries were considerably more sophisticated than Africa and Asia in terms of the frequency and content of their statistical programs and the quality of technical materials. Not surprisingly, the study concluded that the training needs of the LAC countries in the area of industrial statistics were considerably different from those of the rest of the developing world. Studies conducted in other subject matter areas would undoubtedly produce the same conclusions.

B. Economic Analysis

1. Return on Investment

This project represents an investment in the policymaking infrastructure of LAC countries which will provide a continuous flow of benefits long after the developmental funding is terminated. While the cost of training statisticians, data processors, and managers can be quantified easily, the benefits of improved data and more effective use of data cannot be readily measured. One way of better understanding this cost benefit relationship is to consider the cost of poor decisions. The current economic crisis in the region provides numerous examples of the consequences of bad decisions and misguided policies. In many cases the resulting economic and social costs have been enormous.

In addition to the benefits resulting from improved data, this project will produce benefits from the transfer of skills and knowledge by returned participants to their colleagues back home. Both of these--improved data and transfer of new skills--are indirect project benefits which are too complex to measure here. However, it is possible to calculate the value of direct benefits represented by increased salaries of returned participants.

First, the present value of project costs is calculated in Table 4, assuming that (1) the project has a useful life of 15 years and (2) the opportunity cost of capital is 15 percent. These calculations show the present value of costs to be $12,109,000 over the life of the project.

The expected direct benefits can be represented by the salary increases of returned participants. The magnitude and rate of salary increases for the average returned participant are somewhat difficult to predict. The fact that participants will receive training of varying duration and scope admittedly complicates this even further. The assumptions used here are based on a review of post-training promotions of participants who have been trained in the existing English-language program at the Census Bureau. Participants usually receive promotions after returning home and most advance rapidly within 3 to 5 years of completing training. Currently, the directors of statistics of an estimated 15 countries are graduates of the Census Bureau program.

On average, it is assumed that salary increases directly atributable to ESAYTEC training will be realized within 4 years after the completion of training. These increases are expected to result in a 50 percent increase in income, on average, over the 4-year period.

Table 4. Present Value of Costs

| Year | Cost of Project ($000) | Discount Factor (15%) | Present Value of Project Costs ($000) |
|---|---|---|---|
| 1 | 593 | 1.000 | 593 |
| 2 | 929 | .870 | 808 |
| 3 | 1529 | .756 | 1156 |
| 4 | 2061 | .658 | 1356 |
| 5 | 2382 | .572 | 1363 |
| 6 | 2382 | .497 | 1184 |
| 7 | 2382 | .432 | 1029 |
| 8 | 2382 | .376 | 896 |
| 9 | 2382 | .327 | 779 |
| 10 | 2382 | .284 | 676 |
| 11 | 2382 | .247 | 588 |
| 12 | 2382 | .215 | 512 |
| 13 | 2382 | .187 | 445 |
| 14 | 2382 | .163 | 388 |
| 15 | 2382 | .141 | 336 |
| | | | 12109 |

Due to the wide variation in pay scales and exchange rates in the LAC countries it is difficult to determine an average income for participants before training. The typical trainee is expected to be a senior-level technician or manager with at least 5 years experience. Based on discussions with Census Bureau and U.N. staff with experience in LAC statistical organizations, it was decided to use $8,000 per year as an average salary before training.

These assumptions result in the following profile of benefits to the average participant:

| | Annual Salary |
|---|---|
| Before training (senior technician) | $8,000 |
| Salary increase upon completing training | $9,000 |
| Promotion in second year (to section chief) | $10,000 |
| Promotion in fourth year (to division head) | $12,000 |

Table 5 shows that the present value of direct training benefits alone is $11,644,000. This represents 96% of the present value of project costs. It is reasonable to assume that there will also be significant indirect benefits resulting from improved data and the transfer of skills by returned participants. This would raise the benefit-cost ratio comfortably above 1.00, indicating that investment in this project is clearly justified.

Table 5. Calculation of Direct Benefits Represented by Increased Salaries of Returned Participants

| Year | Number of Participants | | | | | Total Salary Increase of Returned Participants ($000) | Discount Factor (15%) | Present Value of Direct Project Benefits ($000) |
|---|---|---|---|---|---|---|---|---|
| | Trained this Year | Trained to Date | Returned Partic. Earning $9000/yr. | Returned Partic. Earning $10,000/yr. | Returned Partic. Earning $12,000/yr. | | | |
| 1 | 51 | 51 | - | - | - | - | 1.000 | - |
| 2 | 88 | 139 | 51 | - | - | 51 | .870 | 44 |
| 3 | 130 | 269 | 88 | 51 | - | 190 | .756 | 144 |
| 4 | 168 | 437 | 130 | 139 | - | 408 | .658 | 268 |
| 5 | 186 | 623 | 168 | 218 | 51 | 808 | .572 | 462 |
| 6 | 186 | 809 | 186 | 298 | 139 | 1338 | .497 | 665 |
| 7 | 186 | 995 | 186 | 354 | 269 | 1970 | .432 | 851 |
| 8 | 186 | 1181 | 186 | 372 | 437 | 2678 | .376 | 1007 |
| 9 | 186 | 1367 | 186 | 372 | 623 | 3422 | .327 | 1119 |
| 10 | 186 | 1553 | 186 | 372 | 809 | 4166 | .284 | 1183 |
| 11 | 186 | 1739 | 186 | 372 | 995 | 4910 | .247 | 1213 |
| 12 | 186 | 1925 | 186 | 372 | 1181 | 5654 | .215 | 1216 |
| 13 | 186 | 2111 | 186 | 372 | 1367 | 6398 | .187 | 1196 |
| 14 | 186 | 2297 | 186 | 372 | 1553 | 7142 | .163 | 1164 |
| 15 | 186 | 2483 | 186 | 372 | 1739 | 7886 | .141 | 1112 |
| | | | | | | | | 11644 |

2. Summary of Analysis of Effective Demand

Three sources of information were used in the analysis: training needs assessment questionnaires completed by potential beneficiary organizations; interviews with USAID's and other field representatives, and documents supplied by them; and information on past and future training levels extracted from administrative records. Most of this information was collected during the factfinding missions conducted by BUCEN staff to eight countries from October to December 1984. The following countries were visited: Guatemala, Dominican Republic, Honduras, Bolivia, Peru, Venezuela, Argentina, and Uruguay. The principal findings of this analysis are summarized below. The complete analysis appears in Annex G.

Issue: What is the level of aggregate demand and what are the priority training topics?

Finding:

* The LAC countries surveyed by BuCen staff reported needing 9614 person-months of training over the 4-year period from 1985 to 1988. (Only six of the eight countries visited returned completed questionnaires on training needs.) Each country would like to send an average of 98 participants a year for a total of 400 person-months of training.

  These figures must in some cases be inflated; the number of professional staff reported needing training in 1985 is 35 percent of the total employed in the responding organizations. This drops to 17 percent of total projected employment in 1988. Even at the lower rate, which would seem to be more realistic, the reported level of training needs from these six countries alone would be more than enough to sustain the proposed program.

* About 30 percent of the training needs reported are in the area of computer data processing. Other areas of significant demand include data analysis, data collection methods, and economic statistics.

Issue: What is the desired duration of training?

Finding:

* There is strong demand among the countries surveyed for training lasting 6 months or more. Only 28 percent of the person-months of training needed would be met by short-term programs.

* Most potential donors, including USAID's, do not appear to have a particular preference for short-term versus long-term training. However, several donors did indicate a preference for shorter courses because of their lower cost.

Issue: What is the optimal mix of Washington-based versus overseas training?

Finding:

* Donor organizations contacted generally did not express any preference for location of training. Some donors with smaller programs, such as the UNDP and OAS in Guatemala, prefer in-country or subregional courses due to the higher cost of U.S.-based training.

* Some of the potential recipient organizations visited during this study also expressed interest in hosting seminars or workshops.

* It appears that overseas activities should comprise a significant portion of the training provided.

Issue: Is there sufficient effective demand to achieve a financially viable program?

Finding:

While it has proven difficult to measure actual effective demand at this time, it is possible to identify a level of potential demand sufficient to justify the establishment of the proposed program. This finding is based on a review of historical funding patterns for similar programs, current levels of donor interest and known funding sources, and information on potential future sources of support. The experience of the Census Bureau English-language program and the BLS program both demonstrate that a diversified group of donors exists and that sufficient funding is available to support a viable and growing program. Over the years these programs have grown while successfully attracting increasing levels of funding from non-AID donors.

Four of the five USAID's that were visited by BUCEN expressed strong support for the proposed training center (see cables in Annex D). USAID/Tegucigalpa has cabled a tentative commitment to provide $200,000 to $300,000 in fellowsnips annually over the next 4 years. The other USAID's were not able to provide specifics on the number of participants they could fund. However, several did provide information on total funding levels for projects with components in statistics or data use. The response of the non-AID donors was also encouraging, although generally they were unwilling to discuss specifics because funding decisions are made centrally, rather than by their field offices.

Probable sources of fellowship funds totaling $6.9 million over the next 4 years were identified among the AID and non-AID donors visited (see Table 6). This amount includes only those projects with statistical or data use components, or general-purpose training projects, that were specifically mentioned by donors as possible sources of funds.

The information collected so far on probable sources of funding by itself provides a reasonable basis for predicting that actual effective demand will be sufficient. Assuming, for example, that only one quarter of the $6.9 million were actually made available to ESAYTEC, it would cover roughly 50 percent of anticipated fellowship costs during the first 4 years of operation. Since this information is based on an incomplete survey of donors in only 8 of the 18 target countries, total funding levels presumably would be much higher; high enough to support 100 percent of fellowship costs.

TABLE 6. PROBABLE SOURCES OF FELLOWSHIP FUNDING BY DONOR AND YEAR: 1985-1988
(In thousands of dollars)

| Donor and Project | Total 1985-1988 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|
| Total, All Donors | 6870 | 1875 | 2545 | 1300 | 1150 |
| UNFPA/Bolivia, Training in support of population census | 400 | 200 | 200 | | |
| UNDP/Guatemala, Statistical development project | 400 | | 200 | 200 | |
| UNDP/Honduras, Support of population census | 500 | | 150 | 150 | 200 |
| UNDP/Venezuela, Agriculture statistics project | 70 | 70 | | | |
| PAHO/Venezuela, Health statistics project | 60 | 60 | | | |
| USAID/Tegucigalpa | 1000 | 250 | 250 | 250 | 250 |
| USAID/Santo Domingo Training levels for various projects with statistical components | 2280 | 715 | 1165 | 200 | 200 |
| USAID/La Paz | | | | | |
| Training for Development Project | 2000 | 500 | 500 | 500 | 500 |
| Policy Reform Project | 160 | 80 | 80 | | |

The Central and Latin American Scholarship Program (CLASP) is a potentially large source of fellowship funds that is excluded from Table 6. This proposed program will provide an average of almost $30 million per year over the next 5 years for U.S.-based training. It offers an excellent opportunity to further support the initial development of this project. In fact, AID/W should consider making a formal recommendation to missions that a percentage of CLASP funds be earmarked annually for ESAYTEC training. Such a recommendation would clearly signal to missions the priority that AID/W attaches to this project and its contribution policy reform and institution-building in recipient countries.

There are two other potential sources of support which have not yet been fully explored: the private sector and the recipient countries themselves. It is reasonable to expect that over time these will become significant sources of funding, although the magnitude of such support can not be estimated.

The foregoing discussion provides the basis for developing a series of assumptions upon which effective demand can be projected. These working assumptions are as follows:

(1) Significant funding will be available from USAID projects (excluding CLASP), ranging from 35 percent of annual fellowship requirements in FY 1986 to about 25 percent of the total in FY 1990.

(2) A modest amount of CLASP funds will be available for this project and will help take up slack until other sources can be fully tapped.

(3) Significant financial support will be available from multilateral donors and will eventually be greater than AID's contribution.

(4) It should be possible to obtain a substantial amount of funding from private firms.

(5) By 1990 it should be feasible to require countries to fund a portion of tuition, in addition to participant airfare.

An additional and very fundamental assumption is that the total effective demand is considerably larger when the entire target population is taken into account. This demand study covers only eight countries out of a total of 17 Spanish-speaking countries, plus Brazil. The multilateral donors have programs in all of these countries. There are four AID countries not covered in this analysis that are a likely source of funding.

Table 7 below shows a projected level of fellowship funding by source for the period from FY 1986 to FY 1990. The numbers in the table constitute one of many possible scenarios based on the above assumptions.

TABLE 7. PROJECTED LEVEL AND SOURCE OF FELLOWSHIP FUNDING FOR ESAYTEC: FY 1986 - FY 1990
(In Thousands of Dollars)

| Source of Funds | Total FY 1986-FY 1990 | | FY 1986 | | FY 1987 | | FY 1988 | | FY 1989 | | FY 1990 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amt. | % | Amt. | % | Amt. | % | Amt. | % | Amt. | % | Amt. | % |
| Total Funding Required[1] | 5360 | 100 | 141 | 100 | 507 | 100 | 1159 | 100 | 1577 | 100 | 1978 | 100 |
| CLASP | 536 | 12 | 35 | 25 | 127 | 25 | 232 | 20 | 142 | 9 | - | - |
| USAID Projects | 1355 | 25 | 49 | 35 | 127 | 25 | 290 | 25 | 394 | 25 | 495 | 25 |
| UN | 1513 | 28 | 35 | 25 | 127 | 25 | 301 | 26 | 457 | 29 | 593 | 30 |
| OAS, PAHO, IADB | 870 | 16 | 21 | 15 | 76 | 15 | 185 | 16 | 252 | 16 | 336 | 17 |
| Countries and Private Sector | 1086 | 19 | - | - | 50 | 10 | 151 | 13 | 331 | 21 | 554 | 28 |

[1] Estimated level of fellowship funding needed for a self-sustaining program, including tuition fees and participant airfare and per diem. (From Annex H.)

Although it is obviously impossible to predict specific contributions of each sponsor, the analysis presented here clearly demonstrates that the total effective demand for this program should be adequate. Apart from this, it can be stated with some degree of confidence that ESAYTEC will develop a diversified base of support such that AID will not be expected to provide more than a fair share of funding. However, it is also evident that a new program of this sort requires a number of years to establish a constituency and to fully develop all possible funding sources. A significant level of USAID fellowship support is essential while the program establishes other funding sources, as the current Census Bureau and BLS programs have so successfully done. The favorable response of USAID's to this project so far indicates that there will be positive support in this regard.

C. Financial Analysis and Plan

The financial analysis presented below is designed to achieve several key objectives:

-- Having a financially self-sustaining training center beginning in FY 1990;

-- Maximizing the use of project funds for program development during the 5-year project period and;

-- Offering a balanced mix of courses with respect to location, duration and content, in order to meet regional priorities and anticipated demand.

Table 8 summarizes the financial situation of the project from FY 1986 to FY 1990. In table 9 a detailed breakdown of costs is provided by funding source.

TABLE 8. SUMMARY OF ESTIMATED RECEIPTS AND COSTS (FY 1986 TO FY 1990)[1]

| Item | Total FY 1986 - FY 1990 | Fiscal Year 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| Number of Courses Developed | 10 | 3 | 3 | 2 | 2 | - |
| Number of Courses Given | 34 | 3 | 5 | 7 | 9 | 10 |
| In Thousands of Dollars | | | | | | |
| Program Receipts: | | | | | | |
| AID Project Funds | 1000 | 430 | 323 | 108 | 139 | - |
| Program Fees | 2736 | 102 | 284 | 575 | 795 | 980 |
| Total Receipts | 3736 | 532 | 607 | 683 | 934 | 980 |
| Program Costs: | | | | | | |
| Course Development | 336 | 147 | 101 | 44 | 44 | - |
| Instruction | 1216 | 61 | 161 | 254 | 359 | 384 |
| Program Management and Support | 622 | 75 | 95 | 128 | 162 | 162 |
| Equipment, Supplies, Services | 392 | 135 | 98 | 53 | 58 | 48 |
| Program Travel | 45 | 9 | 9 | 9 | 9 | 9 |
| Agency Overheads (31.22%) | 693 | 91 | 114 | 136 | 179 | 173 |
| Contingency | 415 | 13 | 30 | 60 | 124 | 188 |
| Total Costs | 3720 | 532 | 607 | 683 | 934 | 964 |
| Surplus or Deficit | 16 | - | - | - | - | 16 |
| Participant Airfare and Per Diem | 2626 | 39 | 223 | 584 | 782 | 998 |
| Total Fellowship Costs (Program fees, airfare and per diem) | 5360 | 141 | 507 | 1159 | 1577 | 1978 |

[1] The information contained in this table is extracted from the detailed budget projections which appear in Annex H.

TABLE 9. TOTAL PROJECT COSTS BY FUNDING SOURCE AND COST CATEGORY[1]
(FY 1986-FY 1990)

| Description of Costs | Total Costs | Project Costs | Program Fee Costs |
|---|---|---|---|
| 1. Personnel Costs | | | |
| 7-Month Technical Courses | | | |
| Course Development Costs | 256762 | 256762 | - |
| Instructional Costs | 773416 | - | 773416 |
| Subtotal | 1030178 | 256762 | 773416 |
| Workshops | | | |
| Course Development Costs | 79212 | 79212 | - |
| In-country instruction costs | 331310 | - | 331310 |
| U.S.-based instruction costs | 111969 | - | 111969 |
| Subtotal | 522491 | 79212 | 443279 |
| Program Management and Support | 622489 | 195237 | 427252 |
| Total Personnel Costs | 2175158 | 531211 | 1643947 |
| 2. Equipment, Supplies and Services | | | |
| Microcomputers | 56750 | 56750 | |
| Microcomputer software | 2000 | 2000 | |
| Workstations and Pedestals | 2300 | 2300 | |
| Modems | 2850 | 2850 | |
| Microcomputer supplies | 2000 | 2000 | |
| Subtotal | 65900 | 65900 | |
| Simultaneous translation equipment | 9350 | 9350 | |
| Overhead projectors | 3375 | 3375 | |
| Porcelain boards, screens and lecturns | 1900 | 1900 | |
| Transparency machine | 770 | 770 | |
| Slide projector | 385 | 385 | |
| Folding tables | 5720 | 5720 | |
| Chairs | 4200 | 4200 | |
| Subtotal | 25700 | 25700 | |
| Mainframe computer costs | 94000 | | 94000 |
| Installation costs | 2000 | | 2000 |
| Printing and postage | 22000 | | 22000 |
| Translation Costs | 135000 | 130000 | 5000 |
| Interpretors | 26500 | | 26500 |
| Language instruction | 21000 | | 21000 |
| Subtotal | 300500 | 130000 | 170500 |
| Total | 392100 | 221600 | 170500 |

| Description of Costs | Total Costs | Project Costs | Program Fee Costs |
|---|---|---|---|
| 3. Program Travel | 45100 | 36080 | 9020 |
| 4. Agency overheads (31.22%) | 693163 | 177110 | 516053 |
| 5. Contingency | 415000 | 34000 | 381000 |
| TOTAL | 3720670 | 1000000 | 2720670 |

[1] See Annex H for breakdown by fiscal year.

1. Overview of Objectives and Constraints

The schedule for curriculum development, (shown in detail in Table 1 and summarized in Table 8) has two objectives. First, it provides an opportunity to begin instruction and provide rapid feedback to the developmental process. Second, beginning instruction as early as possible will generate fees to partially offset the core costs of the program, thus permitting the use of project funds for purely developmental work.

The estimated curriculum development costs presented here are based on maximum use of existing resources from the English-language program and the development of course modules that can be used in more than one course offering.

Courses will be gradually phased in so that the program will reach full operation in year 5 of the project. The particular program presented in Table 8 was developed in the context of the following guidelines and assumptions:

-- The requirement that ESAYTEC be financially self-sufficient beginning in FY 1990;

-- A practical requirement that tuition fees be comparable to equivalent training in similar technical areas;

-- A perceived need for two types of training in the region; short courses on fairly narrow topics and in-depth technical training provided in longer-term programs aimed at institution building;

-- A constraint on the availability of staff, especially top-level managers, for long-term training, hence the need for a mix of course lengths and the use of a modular format for the 7-month courses;

-- The desirability of offering a significant level of overseas training, in view of the preferences of some donors and the benefits to the program in terms of feedback and overall exposure.

A variety of alternative strategies with respect to the number of courses and mix of course lengths were analyzed in view of these constraints. The program presented here best satisfies these considerations. At the same time, it appears to be a reasonable scenario with respect to the level of fellowship funding that is likely to be available.

2. Detailed Discussion of the Cost Structure

There are three components in the cost structure for this project; developmental costs, instructional costs, and core operating costs. In this section the assumptions and methods used for the cost summaries presented above are discussed. In the first three subsections, the developmental, instructional, and core costs are identified and explained. The fourth subsection describes

the methodology used to estimate costs and to analyze alternatives. A final section provides an analysis of the projected tuition fees in comparison to fees charged for training in other institutions.

a. Developmental Costs

Developmental costs include only staff time. The activities involved are researching existing technology and training materials, identifying course and curriculum objectives, preparing training materials, and testing, evaluating, and finalizing courses. Approximately 3 person-months of professional staff time, at a total cost of $21,000, is required to develop a 3-week workshop or seminar. The level of effort to develop a 7-month modular course is approximately 11 months or about $77,000. These are averages; costs will be greater initially and will gradually decrease as certain core courses are used in more than one curriculum.

The cost of curriculum development was estimated by multiplying the number of classroom hours by a constant cost factor. This factor represents a weighted average of the costs associated with developing individual courses, which vary greatly depending on length and level of complexity. A major determinant of developmental costs for a given course is whether there are materials available and, if so, their completeness, quality, and relevance to the needs of the new program. In the case of courses that are similar to existing courses, some developmental costs will be necessary to (1) incorporate techniques, methodologies, and examples to relate it to LAC conditions, and (2) to compress the course to fit within the shorter time period available in the new program.

The cost factors cited here and used in the budget projections are the result of a detailed study of the content of the proposed curricula. Some research was also done on the availability of Spanish-language textbooks and other "off-shelf" training materials. Separate cost estimates were made for groups of courses that are comparable in terms of level of complexity and similarity to existing courses. This type of analysis yields a cost factor of about 5 for the computer data systems curriculum. The average factor for all the curricula is 3.

The major steps in curriculum development for a 7-month modular program are listed below. The estimated amount of staff time needed for each step, based on an average cost factor of 3, is also indicated. It should be kept in mind that this is an average and the actual allocation of developmental staff time will vary greatly from one curriculum to the next.

(1) Needs analysis and development of instructional objectives -- 1 person-month.

(2) Preparation of course plans, including selection of media and listing training materials required -- 1 person-month.

(3) Review of relevant training materials used in the English-language program and other programs -- .5 person-month.

(4) Inventory of materials available in Spanish and estimation of translation requirements -- .5 person-month.

(5) Design/revision of instruction, including lectures, case studies, simulations, and exercises -- 4 person-months.

(6) Review, testing and finalizing courses -- 1 person-month.

(7) Coordination and review of translation of materials into Spanish -- 3 person-months.

Although the breakdown given above refers to development of the 7-month modular programs, the steps involved and the proportional allocation of staff time would be very similar for short-term seminars and workshops.

b. Instructional Costs

Instructional costs include the time actually spent in the classroom plus time spent in preparation, counseling participants, reviewing assignments, grading papers, supervising laboratory sessions, and updating materials as necessary. For short courses, each hour of class time requires 1.5 hours of outside time. Generally, for the more intensive 7-month courses, 3 hours of outside time are necessary for each hour in class. All these estimates are based on experience with the Census Bureau training program.

c. Core Costs

Core costs include the overall supervision of the program, administrative support, program staff travel, translation of materials, a modest amount of interpreter services, and rental and maintenance of equipment. During the first several years there will be one-time expenditures for purchase of furniture and equipment and for initial staff training. Translation costs also will be high initially as a large volume of course materials are translated into Spanish.

Core costs also include equipment, supplies, and services. A procurement and contracting plan appears in Annex L. A detailed breakdown of core costs is given in Table 9 and in Annex H.

d. Methodology Used

The financial model used to analyze the alternatives for the center's programs was based on the following variables, grouped by category of cost:

Fixed costs (core costs, described above):

Variable costs:

developmental costs
instructional costs
number of courses developed
number of courses given
average size of classes

Variable receipts:

program fees
amount of contributed instructional time

Since there are a variety of unknowns, the relationships among these factors were analyzed in the context of a computer model. The model was used to test the effect of variations in these factors on the financial viability of the program. This was done given (1) reasonable assumptions concerning those variables that could not be controlled and (2) reasonable response in the variables that could be controlled. Thus it was possible to analyze several options in order to find the one that best fits the objectives and constraints outlined in Section C.1 above.

e. Analysis of Training Fees

In determining the level of program fees to be charged, an effort was made to keep them lower than similar programs while also producing sufficient revenues to cover costs. As mentioned earlier, the monthly fee for the 7-month modular courses will be $960 beginning in FY 1987. Starting in FY 1986, tuition for 3-week Washington workshops will be $2250 and the estimated fee for overseas workshops will be $2400. Some comparisons are presented below based on fees currently charged by other institutions.

Short-Term Training:

| | | |
|---|---|---|
| Bureau of Labor Statistics | 4-week course in productivity measurement (including Spanish translation) | $2450 |
| University of Michigan | 1-week management course | $1100 |

Medium- and Long-Term Training:

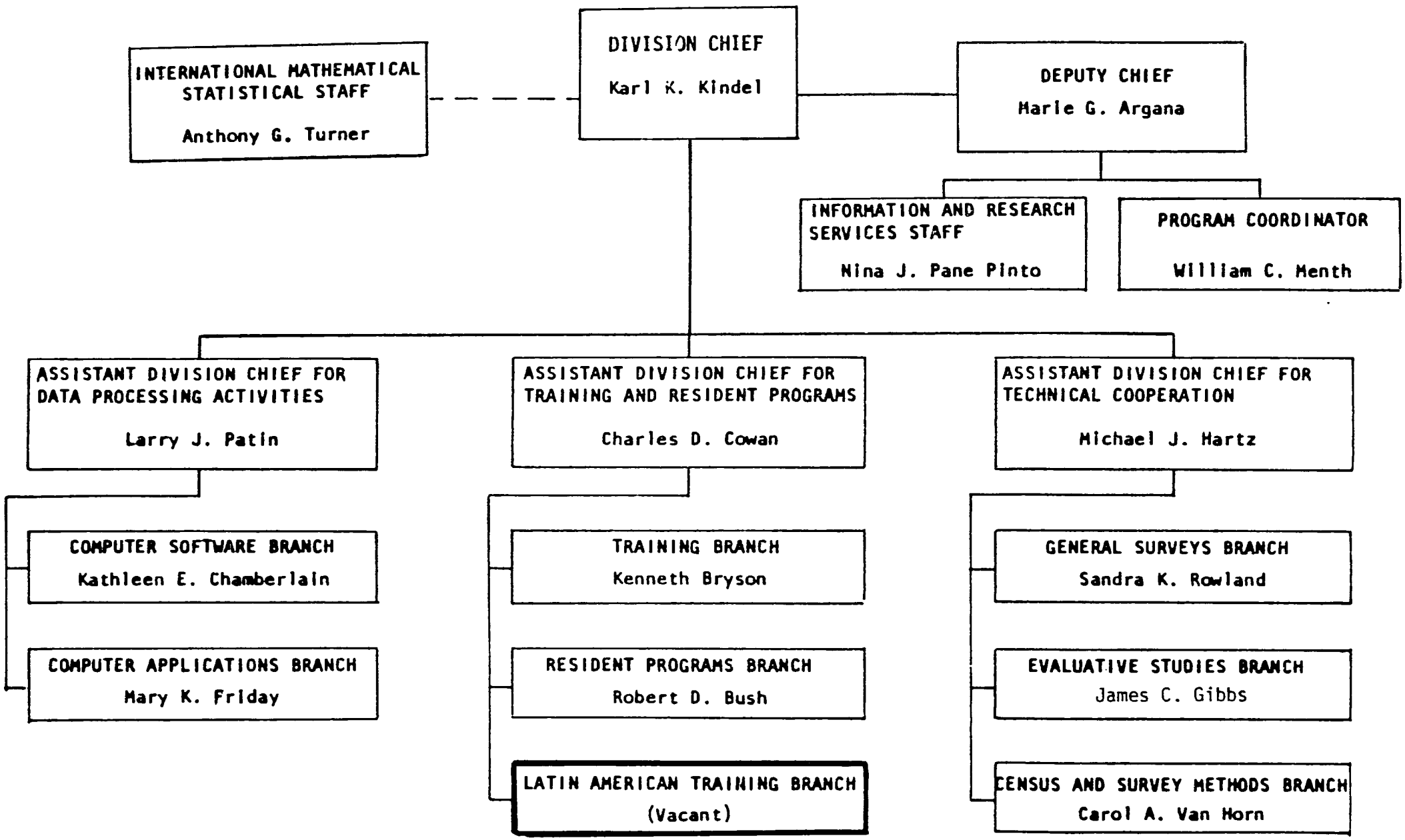
| | | |
|---|---|---|
| Bureau of Economic Analysis and Bureau of Census | Programs in statistics | $840 per month |
| University of Connecticut | Public management development courses | $2200 per month |

## D. Institutional Analysis

### 1. Organizational Arrangements

The training center proposed under this project will reside within the International Statistical Programs Center (ISPC) of the Bureau of the Census. The ISPC includes approximately 100 staff members organized into three functional areas which in turn are subdivided into branches (see chart below).

# INTERNATIONAL STATISTICAL PROGRAMS CENTER



The training center will be organized as the Latin American Training Branch, which will fall under the Training and Resident Programs area. The Latin American Training Branch will include all full-time program staff. Some administrative and support staff will be drawn on a part-time basis from other branches of ISPC.

2. Staff

The ISPC has trained some 5000 developing country statisticians over the past 40 years. An extensive program of seminars and workshops is conducted overseas and in Washington. Long-term training is provided in Washington in the following areas of specialization: Sampling and Statistical Methods, Survey Methods, Food and Agriculture Statistics, Population Statistics, Economic Statistics, and Computer Data Systems.

In addition to training expertise, ISPC staff have solid experience in the administrative aspects of participant training and support. About one third of the participants in the English-language program are AID sponsored and the rest are sponsored by the United Nations and other organizations. Thus, ISPC staff have a thorough knowledge of AID participant training procedures, as well as reporting and processing requirements.

Staff in the English-language program provide administrative support and services to over 100 participants each year. This includes assistance in obtaining housing, furniture, transportation, health insurance, medical care, and a myriad of other participant needs.

To the extent possible, ESAYTEC staff will be recruited from among existing personnel of ISPC and the domestic divisions of the Census Bureau. Much of the full- and part-time instructional staff will be drawn from the overseas technical assistance branches of ISPC. Most administrative and support staff will be recruited from outside ISPC. They will receive on-the-job training from the staff of the English-language program.

Staffing levels will gradually increase over the 5-year project period as the program reaches full operation. The planned staffing pattern for the first and fifth years of the project is given below.

| Position | Number of Staff (Full-time Equivalents): Year 1 | Year 5 |
|---|---|---|
| Branch Chief | 1.0 | 1.0 |
| Instructor/Instructional Designer | 4.0 | 7.0 |
| Program Coordinator | - | 1.0 |
| Program Assistant | - | .75 |
| Secretary | 1.0 | 1.0 |
| Clerk-Typist | - | .50 |
| Computer Technician | - | .75 |
| TOTAL | 6.0 | 12.0 |

3. Facilities

The proposed training center will be housed in the same building as the existing English-language program. It is located in Marlow Heights, Maryland, 2 miles from the Census Bureau headquarters in Suitland. The training center is connected with the Census headquarters and with downtown Washington by a regularly scheduled government shuttle bus. A number of nearby apartment buildings are either served by shuttle bus or are within walking distance.

Classroom space will be gradually expanded to accommodate the anticipated growth of ESAYTEC over the 5-year developmental period. Computer and library facilities will be shared with the existing program. A participant lounge with mail boxes and lockers also will be provided.

E. Social Soundness Analysis

The most immediate beneficiaries of the project will be the LAC government organizations whose capabilities to produce data which is reliable, relevant, and timely will be improved. Government planners and policymakers will benefit from data which is more timely and appropriate for use in decisionmaking and development of project design and evaluation.

This project will bring indirect social benefits over the long term as a result of better decisions and planning. Progress toward empirically-based policy formulation and program management will contribute substantially to improvements in living standards.

Firms in the private sector of these countries and U.S. companies doing business there will benefit from improved data for making decisions about production, marketing, and investment. American private sector vendors of hardware, software, and intellectual exports will benefit by having introduced trainees to modern technologies, which should stimulate demand for their products and services.

Donor agencies promoting fiscal reform and economic and social development will enjoy the benefits of better data for use in policymaking and monitoring projects. Agencies of the U.S. Government which promote trade and investment also will benefit from improvements in the statistical data base of the region.

On the individual level, the proposed project will meet a top priority social development need by training a select target group. Candidates for training will be selected based on their potential impact on the production and use of data for policymaking in their countries. Trainees will be selected from areas critical for meeting AID objectives and they will be returning to positions of importance upon completion of training. Based on the experience of the Census Bureau's English-language program, it can be expected that a sizeable percentage of participants will be promoted upon return to their jobs because of the training they have received.

Women are expected to account for a significant proportion of the participants trained under this project. Women are well represented in public sector institutions, which will be the source of most of the participants. Another factor that will ensure a high level of participation by women is the fact that women are generally over-represented in national statistical organizations as compared to other public sector agencies.

Several of the workshops planned under this project would seem to be especially relevant to AID programs directed at women. The workshops on Data Producer-Data User Interface and Use of Social and Economic Data for Policymaking will provide valuable training to persons working on women-oriented development projects or in women's organizations such as the Inter-American Council On Women. In these and other courses dealing with the collection and analysis of data, this project will emphasize the need to obtain and process data that is disaggregated by sex.

## F. Technical Analysis and Environmental Assessment

There are two aspects of this project for which a technical analysis is relevant; the administrative support system that will be needed to process large numbers of participants and the appropriateness of the technology that will be transferred in training courses. Administrative arrangements are discussed in Section IV.A below.

### 1. Technology Transfer

As discussed earlier, technology transfer constitutes a major focus of this project. Participants will be trained in two types of technology; computer hardware and software technology and technologies relating to the area of

statistics, data collection, and data analysis. It is important to ensure that this technology is appropriate in terms of the level of experience and education of the participants as well as the organizational and social context within which it will be applied. Indeed, the provision of training that is relevant to the needs of the LAC countries is a fundamental rationale for the creation of the proposed center. In practice, the relevance of the technology being taught will be ensured through various types of program evaluation, including post-training field follow-up by staff. During the developmental period, a detailed needs assessment will be done as an integral part of each course developed. The early emphasis on the application of microcomputers to data problems is an excellent example of the project's use of appropriate technology.

2. Environmental Assessment

The outputs of this project are restricted to development of human resources and institutional capabilities. No physical outputs of any type are expected. Therefore, a negative environmental determination is requested.

## IV. Implementation Plan

### A. Administrative Arrangements

1. Management and Operation

The management and operation of the training center will be the responsibility of ISPC. With appropriate input from interested organizations, ISPC will establish overall program goals, training objectives, and participant eligibility requirements. ISPC also will be responsible for recruitment of staff and for coordinating and monitoring instructional assistance provided by other organizations.

It should be noted that the Census Bureau also will provide a significant amount of in-kind support for the operation of ESAYTEC. This will include some space, equipment and staff, and the costs of initial program publicity.

2. Course Announcement and Nomination Procedures

The ESAYTEC training year will run from September to August. A brochure with details concerning course schedules, course content, nomination procedures, and financial arrangements will be prepared and distributed by ISPC each fall to announce course offerings during the forthcoming training year. The 7-month courses will be offered on a regular schedule each year. The schedule for seminars and workshops that are not planned far enough in advance to include in the the annual brochure will be announced separately. In the case of USAIDs and AID representatives, these mail-outs will be supplemented by cabled announcements of courses and all relevant details.

ISPC will establish eligibility requirements for candidates for training. These will involve minimum levels of experience and education. Candidates must fulfill any additional requirements imposed by their sponsoring agency. Individuals and organizations interested in receiving training will be responsible for obtaining the necessary funding.

If a participant is to be sponsored by AID, a PIO/P and biographical data will be sent from the mission to AID/W for transmittal to ISPC. In the case of participants sponsored by the United Nations, a nomination form will be sent by the local U.N. representative to U.N. headquarters in New York. For other sponsors, nominations will be initiated from the representative of the sponsoring agency in the participant's country and forwarded through appropriate channels to ISPC. Own government sponsors will contact ISPC directly.

The above procedures will be followed for all training conducted in Washington. Procedures for overseas seminars and workshops will depend upon the funding arrangements being used.

3. Participant Selection and Processing

Current mission and AID/W training mechanisms will be utilized for the administrative processing of AID-funded participants. The actual screening and selection of candidates may be done by the missions or the host government, depending upon what the missions deem appropriate.

Other sponsoring organizations will be responsible for the selection and processing of the participants they fund. The most likely donors, which include the agencies of the U.N., the OAS and PAHO, all have adequately staffed overseas missions with a training officer who is familiar with the administrative aspects of participant training programs. As mentioned earlier, the Census Bureau has considerable experience operating a program in which a variety of sponsoring organizations are involved.

4. Role of AID

As explained above, USAIDs are expected to nominate and fund a certain number of participants. Overall project monitoring responsibilities will reside in LAC/DR/EST. The project monitoring and evaluation plan appears in Section C. below.

AID/W will also be expected to send representatives to the annual Donor Conference that will be organized by the Census Bureau.

5. Role of Other Donors

As discussed earlier, other donor agencies may participate in this project by providing fellowships and/or instructional support at no cost. These organizations will be invited to attend the annual Donor Conference, where they will have the opportunity to advise on training needs and program objectives. Organizations that provide instructional support will obviously

have a major role in determining the content of the courses or programs in which they are involved. However, all such participation will be monitored by ISPC to ensure that it is consistent with overall program objectives and instructional standards.

6. Recipient Countries

Recipient countries will provide salary continuance during training. In addition, countries will pay airfare for AID-sponsored participants. Countries that host workshops and seminars will provide space, equipment, and some staff. Countries will be expected to pay at least a portion of tuition costs by 1990.

Subject to the guidelines of the funding organization, recipient countries may also participate in the selection of candidates for training.

7. Other U.S. Organizations

As mentioned above, other U.S. institutions will participate in this project, either by providing instruction or, in the case of the private sector, by providing fellowship support.

B. Implementation Schedule

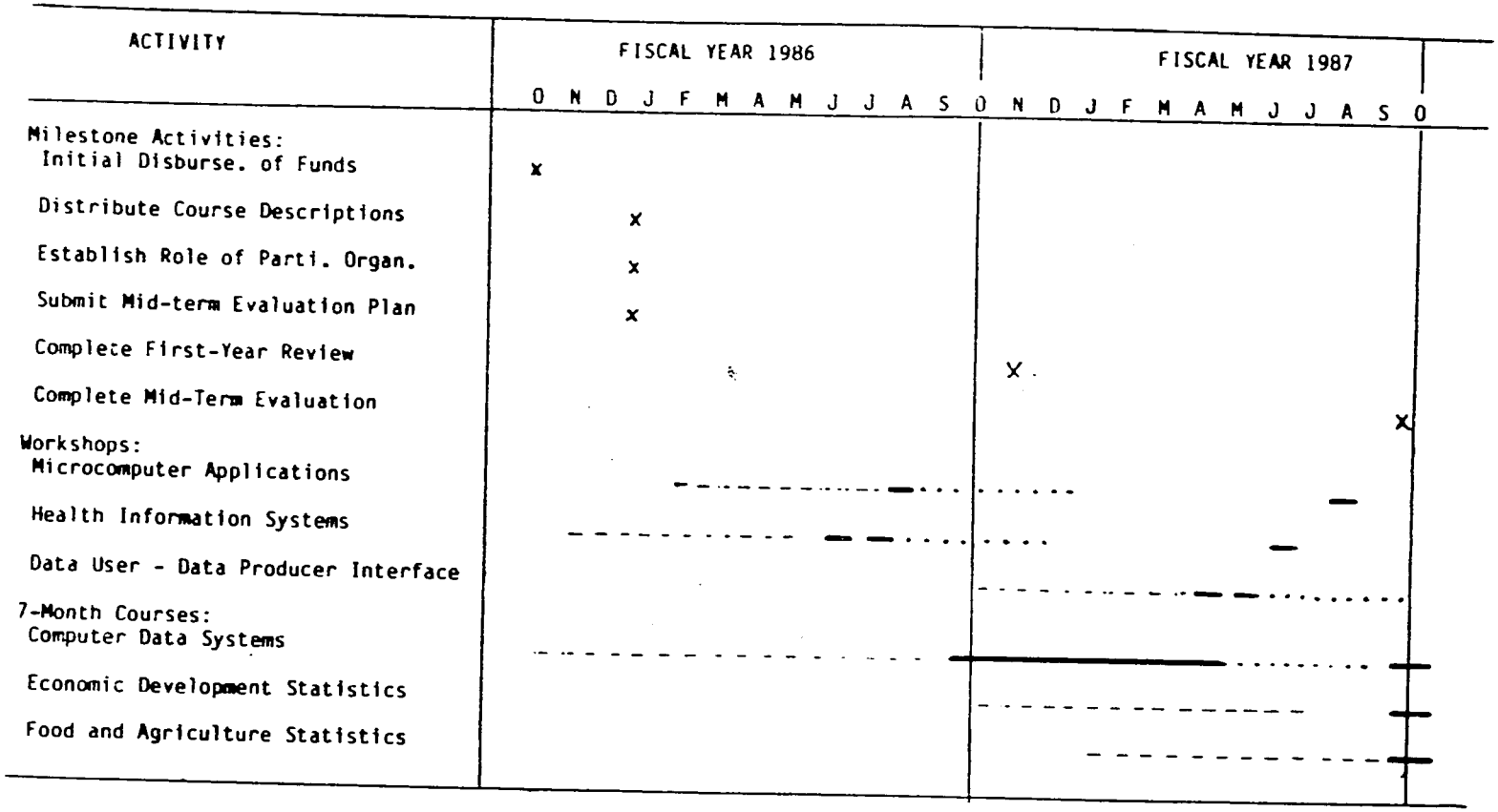
The dates for implementation of key project activities are given below.

| Action | Date | Institution Responsible |
|---|---|---|
| Initial Disbursement of Funds | 10/1/85 | BuCen |
| Submission of Plan for Mid-Term Project Evaluation | 12/31/85 | BuCen |
| First-Year Review Completed | 11/1/86 | LAC/DR/EST |
| Mid-Term Project Evaluation Completed | 9/30/87 | LAC/DR/EST |
| Third-Year Review Completed | 11/1/88 | LAC/DR/EST |
| Fourth-Year Review Completed | 11/1/89 | LAC/DR/EST |
| Terminal Disbursement Date | 9/30/90 | BuCen |
| End-of-Project Evaluation Completed | 11/30/90 | LAC/DR/EST |

The schedule for development and implementation of training activities is given in the two bar charts appearing below. Decisions about which courses to develop and in what sequence will be influenced by the training needs of the region and by the priorities of donors in making fellowship funds available. Indeed, a central feature of this project is to create a training program that will be flexible in order to meet the changing needs of the region.

Although the schedule appearing below should be considered tentative, the schedule for the first two years is reasonably certain, with perhaps one exception. The timing of the proposed workshop on health information systems will depend upon obtaining specific commitments from PAHO. In general, the content and schedule for the 7-month modular courses over the 5-year project period is fairly certain at this point. The content and timing of seminars and workshops is more subject to revision due to changing priorities and donor preferences.

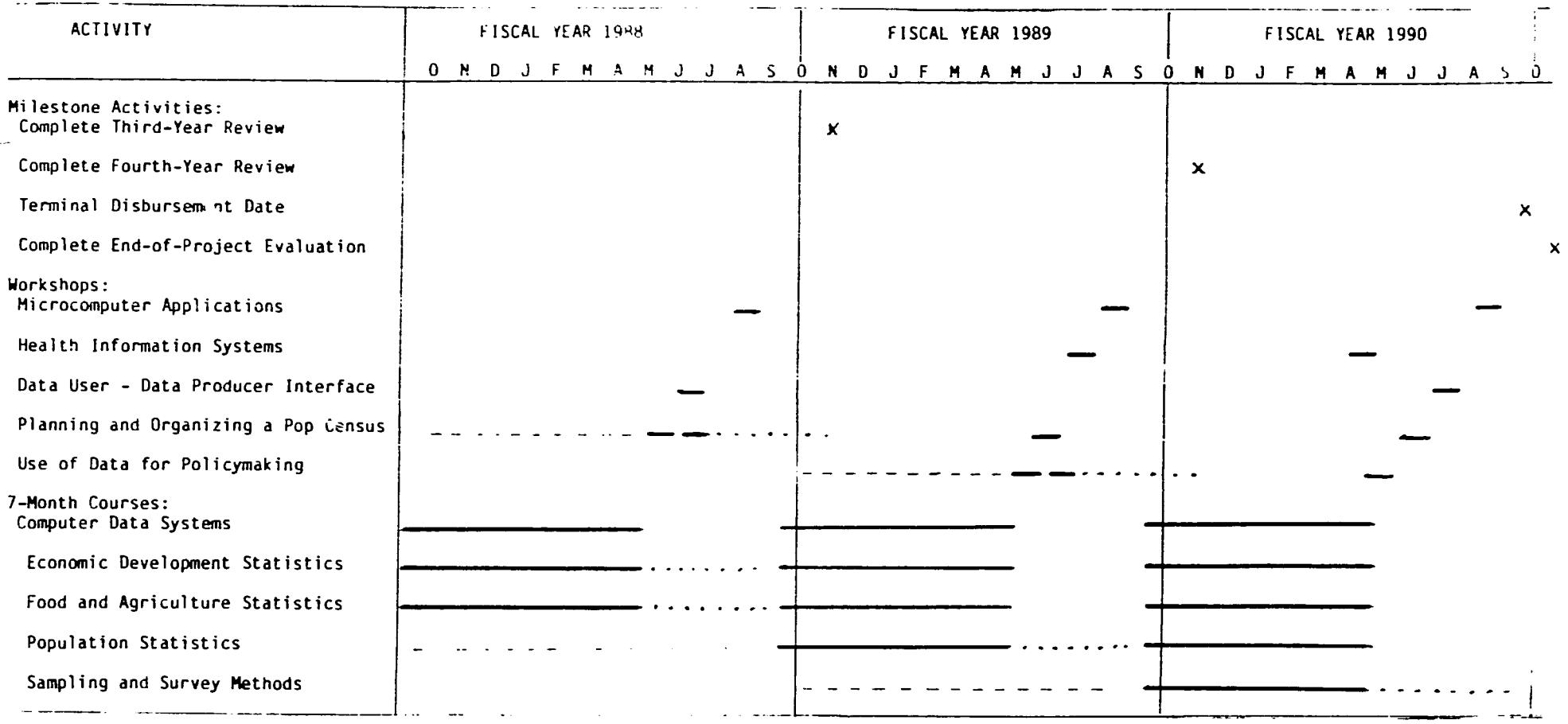
SCHEDULE FOR PROJECT IMPLEMENTATION DURING YEARS 1 AND 2




Key to Symbols:

| | |
|---|---|
| Completion of Milestone Activity | x |
| Development of Training Activity | - - - - - |
| Implementation of Training Activity | ——— |
| Evaluate and Finalize Training Activity | . . . . . |

SCHEDULE FOR PROJECT IMPLEMENTATION DURING YEARS 3 TO 5




Key to Symbols:

| | |
|---|---|
| Completion of Milestone Activity | x |
| Development of Training Activity | - - - - - |
| Implementation of Training Activity | ——— |
| Evaluate and Finalize Training Activity | . . . . . |

C. Monitoring and Evaluation Plan

The progress of the project should be monitored by LAC/DR/EST through monthly and quarterly reports submitted by BuCen, annual review meetings, and a final evaluation conducted at project conclusion. In addition, a mid-term project evaluation will be conducted at the end of the second year in lieu of the yearly review. The yearly monitoring exercises should measure actual use of funds and output delivery versus scheduled targets. The final evaluation should address input usage and output delivery as well as indications of purpose and goal achievement. The mid-term evaluation will be concerned primarily with measuring effective demand.

1. Annual Reviews

Annual monitoring review meetings will be held with BuCen staff at the end of the first, third, and fourth years of the project. The following issues will be reviewed:

| Issues | Sources of Data |
|---|---|
| - Workshop, seminar and course materials prepared | Census Bureau records and training materials |
| - Workshops, seminars and courses conducted on a test basis | Census Bureau records |
| - Assessments and recommendations made by trained participants | Follow-up interviews and questionnaires |
| - Actual project funds expended | Census Bureau records |
| - Actual fellowship funds from other donors | Census Bureau records |

Most of the information necessary for these monitoring reviews would be available from Census Bureau quarterly and monthly reports and project records. The follow-up interviews and questionnaires are also an integral part of the project.

2. Mid-Term Evaluation

A mid-term evaluation will be conducted during months 22 and 23 of the project, with the results to be available no later than month 24. In addition to reviewing the above issues, the principal outcome of the evaluation will be a decision on whether the project should be continued as planned or modified. A detailed plan for the mid-term evaluation will be developed by BuCen with guidance from LAC/DR/EST and submitted within 90 days after initial disbursement of project funds.

3. Final Evaluation

The final project evaluation should address the above monitoring issues as well as the questions of purpose and goal achievement, the longer-term impacts of the project. Specifically, the final evaluation should address:

| Issues | Sources of Data |
|---|---|
| - The projected demand for ESAYTEC training | In-country interviews and survey questionnaires |
| - The projected level of support available from other donors | Interviews with donors |
| - Indications of the impacts of ESAYTEC training on individuals and organizations | Interviews and mailed questionnaires from former students |
| - Projected costs of operating ESAYTEC and projected level of operation | Census Bureau records and projections |
| - Indications of potential long-term impacts | All of the above |

Again, most of the data needed for the final evaluation will be provided by the Census Bureau as an integral part of the project work.

# PROJECT PAPER ANNEXES

# LAC STATISTICS TRAINING CENTER

# ANNEX A

# LOGICAL FRAMEWORK

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY _____ to FY _____
Total U.S. Funding _____
Date Prepared: _____

Project Title & Number: LAC Statistics Training Center

| NARRATIVE SUMMARY | OBJECTIVELY VERIFIABLE INDICATORS | MEANS OF VERIFICATION | IMPORTANT ASSUMPTIONS |
|---|---|---|---|
| Program or Sector Goal: The broader objective to which this project contributes:<br><br>Contribute to improvements in the quality, timeliness and relevance of statistical data in the LAC countries by establishing a capability to effectively train statisticians and data processing staff. | Measures of Goal Achievement:<br>1) 500 to 700 persons trained in the latest technical, managerial, and data processing methods.<br>2) Returned trainees using newly acquired skills in thier jobs. | Follow-up evaluation based on in-country visits, seminars, and written evaluations from returned participants. | Assumptions for achieving goal targets:<br>Curriculum and courses developed meet the priority training needs of the region. |
| Project Purpose:<br>Establishment of a Spanish-language training center providing applied training incorporating the latest technologies; increasing the number of trained statisticians, data processing specialists, and data users; and strengthening LAC institutional capacity to provide training of this type. | Conditions Expected at End of Project:<br>1) 9 or more training activities developed, tested, and fully documented.<br>2) 500 to 700 persons trained.<br>3) 6 or more workshops conducted with significant co-teaching by LAC counterparts. | Project records and reports.<br><br>End-of-project evaluation. | Assumptions for achieving purpose:<br>Adequate level of fellowship support is available from donors. |
| Outputs:<br>1) Seminars and workshops developed.<br>2) 7-month modular courses developed.<br>3) Training activities implemented. | Magnitudes of Outputs<br>1) 5 or more seminars and workshops developed.<br>2) 4 or more modular courses developed.<br>3) 31 or more training activities implemented | Project records. | Assumptions for achieving outputs: |
| Inputs: ($ 000)<br>1) Project funds $1,000<br>2) Fellowship funds from donors $4,300 - $5,500<br>3) Space and training equipment<br>4) Technical and administrative staff | Implementation Target (Type and Quantity)<br>1) FY86-$429;FY87-$322; FY88-$109;FY89-$138.<br>2) $550 committed by FY88.<br>3) Available by FY87.<br>4) Staff in place by mid-FY86. | Project records.<br><br>Mid-term project evaluation. | Assumptions for providing inputs:<br>Fellowship funding available from USAID's and non-AID donors. Space, equipment, and staff available. |

Annex A
Page 1 of 1

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ANNEX B

PID GUIDANCE LETTER

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON D C 20523

ASSISTANT
ADMINISTRATOR

JUL - 3 ...

Mr. Robert Bartram
Assistant Director for International Programs
U.S. Bureau of the Census
Suitland, Maryland 20233

Dear Mr. Bartram:

A review was held for the LAC Statistics Training Center PID (598-0636) on July 6, 1984. At the review the PID was approved and the Bureau of Census (BUCEN) was authorized to go forward with PP development subject to the guidance offered below:

1. Project Design

A. It is understood that, while courses given in host countries are less expensive, courses given in Washington may have greater impact due to the availability of numerous agencies and experts involved in statistics. As both options have something to offer, BUCEN should attempt to identify the optimum mix of Washington-overseas classes.

B. Some questions were raised regarding the cost and necessity of developing an entirely new curriculum for this project. An option such as translating as much of the existing course as possible to Spanish should be considered as it may result in lower developmental cost with no loss of impact. It is understood that the Bureau of Labor Statistics (BLS) has Spanish language courses. Their experiences and costs with regard to these classes should be studied. The PP should include a breakdown of BUCEN's refined curriculum development costs.

C. The optimum course length should be studied further. BUCEN's proposal deals primarily with six and twelve month courses. The one month courses offered have a lower prorated cost than the longer options. During the review we learned that the BLS suffered a sharp drop in demand for its longer courses due to the fact that they were expensive and it was difficult for professionals to get sufficient leave to take them. One month courses, at an increased monthly rate, were subsequently introduced and proved extremely popular. BLS'

experience should be carefully studied when determining the project's mix of course lengths.

D. Please discuss why tuition is not being charged during the first year.

2. Counterparts

A. The proposal of the OAS to chair the Advisory Committee is questionable, especially in view of the fact that their input into the project has not been clarified or formalized to date. The issue of the OAS' input and status should be clarified in the PP. If the OAS is unable to provide any financial support to this project, we do not see what its contribution would be to the Advisory Committee.

B. The roles of the Bureau of Economic Analysis, the BLS, universities and the private sector should also be addressed. Every effort should be made to draw on existing expertise and facilities where possible.

3. Feasibility Study

A. During the feasibility study projected to be carried out prior to the PP development the following points should be covered:

a. The demand study should isolate and identify the effective demand, i.e. those persons or organizations in the public and private sectors that are not only interested in the courses but are willing and able to pay for them.

b. The local USAID Missions should be contacted to assure that they endorse the project and feel that it will have long term demand. Would they consider providing scholarship funds for it?

c. Given that our target group is diverse and economic conditions are in a continuous state of flux, utmost care must be taken to assure that the courses offered address the interests and concerns of the potential participants.

If you have any questions regarding these observations

please feel free to contact Mr. David Evans, who is managing AID's participation in this project.

Thank you.

Sincerely,

Marshall D. Brown
Acting
Bureau for Latin America
and the Caribbean

# ANNEX C

## OFFICIAL COMMUNICATIONS OF SUPPORT

PAN AMERICAN HEALTH ORGANIZATION
*Pan American Sanitary Bureau, Regional Office of the*
WORLD HEALTH ORGANIZATION

525 TWENTY-THIRD STREET, N.W., WASHINGTON, D.C. 20037, U.S.A. CABLE ADDRESS: OFSANPAN

IN REPLY REFER TO: HSS/51/1 (177) TELEPHONE 861-3200

26 April 1985

Mr. Robert Bartram
Assistant Director for International Programs
Scuderi Bldg. Room 709
Bureau of the Census
Washington, D.C. 20233

Dear Dr. Bartram:

We would like to thank you for sharing with us the information on the Spanish-Language Training Program for Applied Statistics and Data Processing Technology, currently being planned by your agency.

As you know, The Pan American Health Organization (PAHO) has a longstanding commitment to cooperate with its Member Governments in the areas of collecting, processing, analizing, interpreting and using statistical data, as such are needed for the timely assessment of the health situation and for the effective planning, administration and evaluation of appropriate health services systems and interventions. Thus, PAHO is following with great attention the development of the Escuela de Estadística Aplicada y Técnica de Computación (ESAYTEC), which promises to fill an important void in practical statistical training in the Spanish Language. Of particular interest to PAHO is the already existing commitment of the National Center for Health Statistics (NCHS), to provide support for training in health statistics.

PAHO would be quite willing to endorse these activities, and to provide some support through promotion of the courses in the countries, the funding of fellowships and instructors, and assistance for the development of course contents and instructional materials. It should be noted, however, that all of the support mentioned above would be contingent on PAHO's concurrence with specific to-be-defined course objectives, contents and target audiences, and would be subject to procedures prevailing at our Organization.

We will be looking forward to favorable developments regarding the Program.

Sincerely,

Raul Vargas

Raul Vargas A., Program Coordinator
Health Systems Development

UNITED NATIONS
FUND FOR POPULATION ACTIVITIES

FONDS DES NATIONS UNIES
POUR LES ACTIVITES EN MATIERE DE POPULATION

220 EAST 42nd STREET
NEW YORK, N Y 10017

TELEPHONE: 754-1234

CABLE ADDRESS UNDEVPRO • NEW YORK

REFERENCE:

19 March 1985

Dear Mr. Cowan,

This is in reference to your letter dated February 6, 1985 regarding your activities in Latin American countries in the field of training.

We are especially interested in receiving information on the results of your survey of these countries' training needs, as well as in the intended future programme.

UNFPA has always been in favour of this type of activities, and would be willing to support participation in the programme at a later stage, if deemed appropriate.

We would also appreciate it if you would keep us informed on all new developments on this area.

Sincerely yours,

Edison Wibmer
Chief, Technical Branch
Technical and Planning Division

Mr. Charles D. Cowan
Assistant Chief for Training and
Resident Programs
International Statistical Programs Center
Bureau of the Census
Washington, D.C. 20233

DEPARTMENT OF HEALTH & HUMAN SERVICES

# Memorandum

Date June 9, 1983

From Director, National Center for Health Statistics

Subject National Center for Health Statistics (NCHS) Participation in a Spanish Language Training Center for Applied Statistics

To Assistant Secretary for Health and the Surgeon General
Through: ES/PHS ____

The Bureau of the Census has, for the last 40 years, provided statistical training to statisticians and data processors from over 150 countries. Currently, through its International Statistical Programs Center, about 120 participants are trained annually in data collection, processing, and analysis. Included in that training is one course in Vital Registration Methods whose course content and staffing are provided by the NCHS (although costs are covered by the Bureau of the Census). Program costs for this statistical training are derived from fees provided by participants' sponsoring agencies that also pay a subsistence allowance and travel expenses.

Although initial Census Bureau efforts involved a focus on Latin American countries and were in fact carried out largely in Spanish, increasing demand from other regions has resulted in a diminished participation of Spanish-speaking countries. There are none now enrolled in the program.

A new program is now proposed aimed at meeting the statistical needs of Latin America. In response to a request from OAS member states, the National Statistics Institute of Spain, the Bureau of the Census and the Organization of American States propose to create a Spanish-Language Center for training in techniques for collection, processing, and analysis and use of statistical data. Each of the institutions named will provide training staff to the Center's program in areas of their expertise. Descriptions of the proposed training center are attached.

NCHS has been requested to participate in the training center by providing staff for the teaching of a course in health statistics, and by assisting in the selection of appropriate students for training. Those enrolled in the health statistics course would also enroll in other appropriate courses offered in the training center.

It is my feeling that the proposed training center would serve a very positive function that would be fully consistent with the goals and function of NCHS. Therefore, I am recommending that NCHS participate in the manner proposed.

M Feinleib

Manning Feinleib, M.D., Dr.P.H.

OK MB

2 Attachments

AUG 16 1983

INSTITUTO INTERAMERICANO DE COOPERACION PARA LA AGRICULTURA
INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE
INSTITUT INTERAMERICAIN DE COOPERATION POUR L'AGRICULTURE
INSTITUTO INTERAMERICANO DE COOPERACÃO PARA A AGRICULTURA



GENERAL DIRECTORATE
Washington Office
1889 F Street, N W , Suite 840
Washington, D C 20006
Telex: 197649 IICA UT

AE/US-1134
August 10, 1983

Mr. Bruce Chapman
Deputy Assistant to the President
Office of Planning and Evaluation
The White House
Room 350 OEOB
Washington, D.C. 20503

Dear Mr. Chapman:

It was a pleasure meeting you again during lunch hour and learn of your new appointment. As you recall, we discussed briefly two information related projects: a) The International Data Base (IDB) Initiative and, b) The Spanish-language Training Center for Applied Statistic and Data Processing Technology.

I agreed to send you a brief statement on some of our activities which might further facilitate the implementation of these two projects as they relate to the field of agriculture.

With regard to the International Data Base, our Institute has taken initiative in cooperation with other agencies to develop an Inter-American Statistical Information System for Agricultural Development. At the Eigth Inter-American Conference on Agriculture, IICA was entrusted with the responsibility of guiding and leading this activity, with the participation and support of each member country and other international agencies which operate in the agricultural sector of the region. We have held two important workshops on "Opportunities for Data Sharing". Enclosed for your information is a copy of the proceedings of the June 6, 1983 Workshop. As you can appreciate from the proceedings, the Bureau of Census made a presentation of the International Data Base activities. Also, there was a discussion of the Spanish-language Training Center for Applied Statistic and Data Processing Technology.

The Spanish-language Training Center, if well executed, has much to offer Latin America. We believe there are obvious linkages between the objectives of the Center and those of IICA's efforts in this field as they relate to agriculture. Attached is a project prepared for a Hemispheric Statistical Information System for Agricultural Development.

../..

During the last Workshop on Data Sharing we suggested that those responsible for developing and approving the Center idea might want to consider conducting the training activities related to agriculture at our Headquarters located in Costa Rica. This would provide a natural outreach to Latin America for the Washington based Center. The Institute has national offices in 29 Member countries and is constantly in contact with decision-makers and technicians of the national agricultural institutions. Agriculture for the Hemisphere is of the highest importance and emphasis on this sector should be given high priority.

We would like to explore this possibility of joint cooperation which might facilitate the implementation of this important project as quickly as possible. The enclosed documentation provides considerable detail as to some specific areas of action.

Sincerely yours,

Michael J. Moran

Michael J. Moran
Chief, International Organizations Division

# ARGENTINA

FOR YOUR INFORMATION
PARA SU INFORMACION

232

Nº

S.C.I.

Buenos Aires, 14 de febrero de 1984

OBJETO: VIII Conferencia Interamericana de Estadística (CIE) de la OEA, de octubre 1983, realizada en Buenos Aires.

El Ministerio de Relaciones Exteriores y Culto- Subsecretaría de Cooperación Internacional- tiene el agrado de dirigirse a esa Representación Diplomática con relación al tema del epígrafe.

Al respecto, cabe señalar que la Conferencia fue informada de la propuesta conjunta elaborada por la Secretaría General de la OEA y la Oficina del Censo de los Estados Unidos sobre la creación de una escuela de estadística aplicada, (ESAY-TEC).

Asimismo se hace notar la necesidad de armonizar la creación del nuevo centro con las acciones del CIENES, centro de capacitación en estadística que funciona dentro del marco de la OEA, tal como fuera expresado en el documento de presentación de las actividades programadas de ESAYTEC.

Teniendo en cuenta el conocimiento de las gestiones realizadas para obtener fuentes de financiación para dicho proyecto, y la respuesta favorable manifestada por la Agencia para el Desarrollo Internacional, (AID) de Estados Unidos, se espera contar con la ayuda de ESAYTEC para atender gastos de estadía y traslado de los participantes, en caso de que limitaciones presupuestarias pudieran impedir que se destinanaran fondos nacionales para 1984.

Reitero por último, el interés del Gobierno Argentino en que personal del INDEC, se capacite en los cursos de ESAY-TEC, lo cual redundaría en un claro beneficio para el país.

El Ministerio de Relaciones Exteriores y Culto-

FOR YOUR INFORMATION
PARA SU INFORMACION

//..

Subsecretaría de Cooperación Internacional- saluda a esa Representación Diplomática, con su mayor consideración.

A LA EMBAJADA DE ESTADOS UNIDOS
BUENOS AIRES

Translation: EECouts 3/16/84

No. 232
S.C.I.
Buenos Aires, February 14, 1984

RE: Eighth Inter-American Conference on Statistics (CIE) of the OAS, held in Buenos Aires in October, 1983

The Ministry of Foreign Affairs--Subsecretariat of International Cooperation--is pleased to address the U.S. Diplomatic Representation in reference to the above subject.

In this respect, it is worth pointing out that the Conference was informed of the U.S. Census Bureau and OAS General Secretariat's proposal for the development of a school of applied statistics (ESAYTEC).

Likewise, attention is drawn to the need to harmonize the establishment of the new center with the activities of CIENES, a statistical training center which operates within the framework of the OAS, as stated in the introductory document on ESAYTEC's programmed activities.

In view of the arrangements that have been made to obtain sources of funding for the project, and of AID's favorable response, it is expected that ESAYTEC will help cover the participants' per diem and travel expenses, in case budget constraints prevent the allocation of national funds for 1984.

Finally, I wish to reiterate the Argentinian government's interest in training INDEC personnel at ESAYTEC, which would clearly benefit the nation.

SENT TO THE UNITED STATES EMBASSY IN BUENOS AIRES

FROM THE MINISTRY OF FOREIGN AFFAIRS--SUBSECRETARIAT OF INTERNATIONAL COOPERATION

# BOLIVIA

MINISTERIO DE RELACIONES
EXTERIORES Y CULTO



DGRI/ESOC/40 /239/02c/A

RECEIVED
USAID
31 ENE. 934
LA PAZ

La Paz, 23 de enero de 1984

USAID/BOLIVIA
Received
2 FEB. 1984
Hour:
LA PAZ
D.P.E. Office

Señor Representante:

Adjunto a la presente remito a usted, fotocopia de la nota Nº 41 de 29 de diciembre de 1983, referente a la creación de la Es - cuela de Estadística aplicada y tecnicas de computacion (ESAYTEC) que operará con el auspicio de la OEA y el Bureau of the Census de los Estados Unidos de Norteamerica.

Bur

Deseo destacar el interés del Instituto Nacional de Estadística (INE) en la capacitación simultánea de estadística y procesamiento de datos, obtención, procesamiento y análisis de estadísticas de empleo, ingresos y gastos familiares que empalma estadísticas trimestrales de industria manufacturera con estos datos anuales; estadísticas fiscales y de comercio exterior.

Con este motivo reitero a usted, las seguridades de mi distinguida consideración.

DR. CARLOS RIVAS ESPAÑA
Subsecretario de Relaciones Exteriores

Al señor
Henry H. Baff Ford
REPRESENTANTE DE USAID EN BOLIVIA
P R E S E N T E.-

| FILE INF | | |
|---|---|---|
| DIV | ACTION | INFO |
| DIR | | ✓ |
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31 ENE. 1984

13

# DOMINICAN REPUBLIC

"AÑO DE LA SUPERACION NACIONAL"

STP/No.

Señor
Philip Schwab
Director de la Agencia
Internacional para el Desarrollo (AID)
Ciudad

Distinguido señor Director:

Me place dirigirme a usted para participarle que con fecha 31 de mayo del año en curso, se recibió en la Oficina Nacional de Estadística, una carta del Sr. Robert O. Bartram, Director Asistente de los Programas Internacionales del Bureau de Censos de los Estados Unidos, anexa, donde nos comunica las gestiones que se están encaminando para la creación de la Escuela de Estadística Aplicada y Técnicas de Computación (ESAYTEC).

En la referida comunicación, se nos informa que en la actualidad, se están elaborando los programas de estudios que debe desarrollar la ESAYTEC durante los primeros 3 años y se nos pide entrar en contacto con ustedes, a fin de preparar un plan de adiestramiento en materia de Estadística y Procesamiento de Datos, que refleje las necesidades del sector público y privado, al igual que las necesidades identificadas por ustedes.

El plan solicitado, que es una especie de listado donde deben aparecer los temas prioritarios de adiestramiento, el número de participantes que esperamos adiestrar cada año y los organismos cuyo personal requiere adiestramiento, debe ser telegrafiado a la Oficina del Censo y a la Sede de la AID en Washington.

Es con ese propósito que nos dirigimos a usted, a fin de presentarle el plan de adiestramiento en materia de Estadística y Procesamiento de Datos, preparado por nuestra Oficina Nacional de Estadística, anexo, de manera que sea complementado

.../

Sr. Philip Schwab
Director de la Agencia Internacional
para el Desarrollo (AID)
Página No. 2

con las necesidades identificadas por ustedes y se sirvan telegrafiarlo a los Organismos Norteamericanos, antes señalados.

Con sentimientos de consideración y estima, le saluda.

Atentamente,

L. Orlando Haza
Secretario Técnico de la Presidencia

LOH
SEO/HDD
aca

Anexo : Citado

PLAN DE ADIESTRAMIENTO EN MATERIA DE ESTADISTICA Y PROCESAMIENTO DE DATOS.

| TEMA | PARTICIPANTES/AÑO | ORGANISMOS A LOS CUALES VA DIRIGIDO |
|---|---|---|
| 1.- Estadística Demográfica | 4 | - Oficina Nacional de Estadística<br>- Secretaría de Estado de Salud Pública y Asistencia Social<br>- Consejo Nacional de Población y Familia<br>- Asociación Dominicana Pro-Bienestar de la Familia |
| 2.- Estadística Agrícola | 3 | - Oficina Nacional de Estadística<br>- Secretaría de Estado de Agricultura<br>- Instituto Agrario Dominicano |
| 3.- Muestreo y Métodos Estadísticos | 4 | - Oficina Nacional de Estadística<br>- Secretaría de Estado de Agricultura<br>- Secretaría de Estado de Salud Pública y Asistencia Social<br>- Consejo Nacional de Población y Familia<br>- Banco Central |

Continúa...

| T E M A | PARTICIPANTES/AÑO | ORGANISMOS A LOS CUALES VA DIRIGIDO |
|---|---|---|
| 4.- Estadísticas Económicas | 6 | - Oficina Nacional de Estadística<br>- Banco Central<br>- Secretaría de Estado de Finanzas<br>- Secretaría de Estado de Industria y Comercio |
| 5.- Organización y Administración de Censos | 2 | - Oficina Nacional de Estadística |
| 6.- Organización y Administración de Encuestas | 4 | - Oficina Nacional de Estadística<br>- Banco Central<br>- Secretaría de Estado de Salud Pública y Asistencia Social<br>- Consejo Nacional de Población y Familia<br>- Secretaría de Estado de Agricultura |
| 7.- Sistemas de Procesamiento de Datos | 4 | - Oficina Nacional de Estadística<br>- Secretaría de Estado de Agricultura<br>- Secretaría de Estado de Salud Pública y Asistencia Social |

Continúa ...

| TEMA | PARTICIPANTES/AÑO | ORGANISMOS A LOS CUALES VA DIRIGIDO |
|---|---|---|
| 8.- Manejo de Paquetes Estadísticos | 6 | - Oficina Nacional de Estadística<br>- Consejo Nacional de Población y Familia<br>- Secretaría de Estado de Agricultura<br>- Secretaría de Estado de Educación, Bellas Artes y Cultos. |

# ECUADOR

República del Ecuador

INSTITUTO NACIONAL DE ESTADISTICA Y CENSOS

Of.Nª-DIRG-84-

Quito, a 28 JUN. 1984

Señor
Robert O. Bartram
Director Asistente para Programas Internacionales
Oficina de los Censos
Washington

De mis consideraciones :

En contestación a su atento oficio de fecha 31 de Mayo de 1984, mediante el cual informa las gestiones realizadas para la creación de la Escuela de Estadística Aplicada y Técnicas de Computación (ESAYTEC), cúmpleme manifestarle lo siguiente:

1. El INEC considera muy importante la función de ESAYTEC, ya que por ser la capacitación en español, dará acceso a un mayor número de funcionarios, contribuyendo así al desarrollo estadístico en esta Institución en particular, y en el país en general. Por esta razón, el INEC respalda este proyecto, y contribuirá en la medida de sus posibilidades, a la consecución de los objetivos planteados, así como al aprovechamiento de los conocimientos y experiencias a difundirse.

2. Para la elaboración del solicitado plan de adiestramiento en materia de estadística y procesamiento de datos, el INEC está considerando su programación de actividades para el período 1985-1988, así como las necesidades de otras instituciones productoras de información estadística, mediante consulta a través del Consejo Nacional de Estadística y Censos (CONEC).

3. Paralelamente a la elaboración del referido plan, el INEC está cursando oficios a los Representantes de la OEA, AID y ONU en Quito, a fin de comunicarles el interés en la

República del Ecuador

INSTITUTO NACIONAL DE ESTADISTICA Y CENSOS

creación de esta organización.

Aprovecho la oportunidad para reiterarle mis sentimientos de consideración y estima.

Muy Atentamente,

Econ. Wilson Ruales M.,
DIRECTOR GENERAL

Instituto Nacional de Estadística y Censos
Quito-Ecu...

GUATEMALA

[illegible],
Julio 5 de 1984



Señor Director
AID
Washington D.C. 20523
U.S.A.

Señor Director:

De conformidad con la nota de fecha 31 de mayo del año en curso de la Oficina del Censo del Departamento de Comercio de los Estados Unidos, tengo el agrado de presentarle los requerimientos de la Dirección General de Estadística.

DEPARTAMENTO DE ESTADISTICAS
INDUSTRIA, COMERCIO Y SERVICIOS

A. TEMAS PRIORITARIOS DE ADIESTRAMIENTO:

1) Estadística en general.
2) Técnicas de Investigación (Encuestas y Censos).
3) Técnicas de Crítica y Codificación.
4) Lineamientos para la elaboración de cuadros.
5) Técnicas procesamiento computarizado aplicado a estadísticas de Comercio Exterior, Industriales, Indices de Precios y Transportes.
6) Análisis estadístico.
7) Metodología para Producción de estadísticas básicas de Comercio Exterior Industriales, Indices de Precios y Transportes.
8) Planeamiento de investigaciones estadísticas en el campo de Comercio Exterior, Industriales, Indices de Precios y Transportes.
9) Planificación de sistemas de estadísticas de Comercio Exterior, Industriales, Indices de Precios y Transportes.
10) Métodos para aplicación de Indices en Comercio Exterior, Industriales, Precios y Transportes.
11) Cuentas Nacionales.

B. NUMERO DE PARTICIPANTES POR ADIESTRAR POR AÑO:

1) Promedio de cinco personas principalmente Jefes de Sección o Unidad.

DEPARTAMENTO DE ESTADISTICAS AGRICOLAS

1) Diseño de Muestras, dos personas.

2) Elaboración de Cuentas de disponibilidad/utilización y Hojas de Balance de Alimentos, dos personas.

3) Elaboración de Estadísticas Continuas, dos personas.

4) Especialización en Estadísticas Agrícolas, dos personas.

5) Planificación y Administración de Censos y Encuestas, dos personas.

DEPARTAMENTO DE ESTADISTICAS DEMOGRAFICAS Y SOCIALES

A. NECESIDADES DE CAPACITACION DE PERSONAL EN ESTADISTICA Y COMPUTACION EN LOS TEMAS DE:

1) Demografía.

2) Salud que comprende estadísticas hospitalarias, consulta externa y vitales.

3) Sociales que comprende estadísticas culturales, judiciales, contractuales

4) Computación.

Candidatos: se sugiere que participen dos candidatos anuales por cada tema.

Sin otro particular, me suscribo muy atentamente.

Lic Arnoldo Calderón González
Director Gral. de Estadística

DIRECCION GENERAL DE ESTADISTICA • REPUBLICA DE GUATEMALA •

65

Guatemala, July 5, 1984

No. 01245

The Director
AID
Washington, D.C. 20523

Dear Sir:

In agreement with the letter of May 31, 1984, from the Census Bureau, U.S. Department of Commerce, I am pleased to state the requirements of the General Directorate of Statistics.

DEPARTMENT OF STATISTICS

INDUSTRY, COMMERCE, AND SERVICES

A. PRIORITY TRAINING TOPICS

1) General Statistics

2) Research Techniques (Surveys and Censuses)

3) Editing and Coding Techniques

4) Guidelines for the preparation of tables

5) Computer techniques applied to Foreign Trade, Industry, Price Indexes, and Transportation statistics

6) Statistical analysis

7) Methodology for the production of basic statistics on Foreign Trade, Industry, Price Indexes, and Transportation

8) Planning of statistical research in the field of Foreign Trade, Industry, Price Indexes, and Transportation

9) Planning of statistical systems on Foreign Trade, Industry, Price Indexes, and Transportation

10) Methods for the application of indexes on Foreign Trade, Industry, Price Indexes, and Transportation.

11) National Accounts.

B. NUMBER OF PARTICIPANTS TO BE TRAINED PER YEAR:

1) An average of five people, mainly Chiefs of Branches or Units.

DEPARTMENT OF AGRICULTURAL STATISTICS

1) Sampling Design, two people.

2) Preparation of Money Supply/Drawing Accounts and Food Balance Sheets, two people.

3) Development of Current Statistics, two people.

4) Specialization in Agricultural Statistics, two people.

5) Planning and Management of Censuses and Surveys, two people.

DEPARTMENT OF DEMOGRAPHIC AND SOCIAL STATISTICS

A. TRAINING NEEDS OF STATISTICS AND COMPUTER SCIENCE PERSONNEL ON THE SUBJECTS OF:

1) Demography.

2) Health statistics, including hospital, outpatient and vital statistics.

3) Social statistics, including cultural, legal, and contractual statistics.

4) Computer science.

Candidates: It is suggested that two people participate annually per subject.

Sincerely,

Lic. Arnold Calderon Gonzalez
General Director of Statistics
Republic of Guatemala

HONDURAS

SECRETARIA DE ECONOMIA

# DIRECCION GENERAL DE ESTADISTICA Y CENSOS

REPUBLICA DE HONDURAS, C. A.

Tegucigalpa, D. C., 2 de enero de 1984 Oficio Nº 354

Doctor
EVELIO O. FABBRONI
Secretario General
Instituto Interamericano
de estadística
Santiago de Chile
República de Chile

Estimado doctor Fabbroni:

En respuesta a su carta de fecha 14 de diciembre de 1983, en la cual me plantea los asuntos relacionados con la ESAYTEC, me permito comunicarle lo siguiente:

Para que la capacitación que se pretende dar en la Escuela en mención sea efectiva, es preciso establecer los mecanismos internos en el país, a fin de coordinar con el señor Bartram y las autoridades locales todas aquellas actividades encaminadas a alcanzar las metas propuestas, por lo cual he decidido nombrar como Oficial de Enlace entre la ESAYTEC y esta Dirección, al Licenciado Roberto Guevara Salinas. El Licenciado Guevara, participó en la Primera Conferencia de Directores de Estadística de los Países Iberoamericanos, realizada en Madrid el año pasado y por lo tanto conoce el asunto, además es docente universitario en las áreas de Matemáticas y Estadística y egresado del CIENES (1977), consecuentemente solicito a usted su beneplácito por tal designación, a la vez que la correspondencia debe ser dirigida a él, quien a su vez me informará del grado de avance del Proyecto.

Naturalmente que Honduras es quizás de los países Latinoamericanos más necesitados de la capacitación, por lo cual en los próximos días haremos todas las gestiones pertinentes ante los miembros del Gabinete de Gobierno, la Empresa Privada y el señor Representante de AID en Honduras señor Anthony Cauterucci, con el propósito de obtener com-

SECRETARIA DE ECONOMIA

# DIRECCION GENERAL DE ESTADISTICA Y CENSOS

REPUBLICA DE HONDURAS, C. A.

Tegucigalpa, D. C. Oficio Nº

OFICIO No. 354 2- 2/1/84

promisos de apoyo al Programa, principalmente en el orden financiero. Además, visitaremos a los Gerentes de las líneas aéreas que operan en el País como TAN-SAHSA, AIR FLORIDA TACA INTERNACIONAL, a efecto de investigar la posibilidad de obtener un sustancioso descuento para las personas que sean seleccionadas como becarios.

Por otra parte, elaboraremos un formulario para determinar las necesidades de capacitación en las distintas Instituciones, de cuyos resultados informaremos a usted y al señor Bartram en su oportunidad.

Finalmente, me gustaría me informar cuando comenzará a operar la Escuela, puesto que ya podríamos ir seleccionando los primeros becarios.

Sin otro particular, y reiterándole las muestras de mi más alta y distinguida consideración, se suscribe de usted,

Atentamente,

LIC. RUFO STANISLAUS PAREDES
Director General

DIRECCION GRAL. DE ESTADISTICA Y CENSOS
DIRECCION
Honduras C. A.

cc; Lic. Roberto Guevara Salinas

cc: Mr. Robert Bartram

cc: Arch.

/ods.

PERU

PERU

ACTION COPY

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*Department of State*

Annex C
Page 31 of 35

INCOMING TELEGRAM

PAGE 01 LIMA 04726 2513362 2618 080433 AID4599
ACTION AID-00

ACTION OFFICE ISPC-01
INFO LAEM-02 LASA-03 LADP-04 LADR-03 SAST-01 STIU-01 IT-06
COM-02 RELO-01 MAST-01 /025 A1 1125

INFO OCT-00 ARA-00 /000 W
331452 2513382 /38

P 242215Z APR 84
FM AMEMBASSY LIMA
TO SECSTATE WASHDC PRIORITY 5370
INFO USDOC WASHDC

UNCLAS LIMA 4726

AIDAC

EO 12356: NA
SUBJ: ESCUELA DE ESTADISTICA APLICADA Y TECNICAS DE COMPUTACION (ESAYTEC)

REF: STATE 080655

IN RESPONSE TO REFTEL DR. GRACIELA FERNANDEZ BACA DE VALDEZ, CHIEF OF THE NATIONAL STATISTICS INSTITUTE HAS PROVIDED THE FOLLOWING INFORMATION.
1. EMPHASIS SHOULD BE GIVEN TO THE APPLICATION OF SAMPLING TECHNIQUES FOR SPECIFIC SURVEYS, PERMANENT IMPLEMENTATION AND APPLICATION OF DATA BASES FOR CHRONOLIGICAL SERIES BANKS.

2. PRIORITY TRAINING TOPICS. SAMPLING FOR SPECIFIC SURVEYS (HEALTH, NUTRITION, EMPLOYMENT, LEVELS OF LIVING, ETC.) AND DESIGN OF DATA BASE FOR CHRONOLOGICAL SERIES INFORMATION BANKS.
3. PRIORITY ORGANIZATIONS NEEDING TRAINING. ALL SECTOR (MINISTRY) STATISTICAL OFFICES AND DECENTRALIZED PUBLIC INSTITUTIONS.
4. ESTIMATED NUMBER OF PARTICIPANTS NEEDING TRAINING ANNUALLY. DURING FIVE YEARS THE NATIONAL STATISTICS INSTITUTE WILL BE ABLE TO OFFER TEN CANDIDATES IN EACH SPECIALTY.
5. TRAINING STYLE. SHOULD BE PROGRAMMED FOR SHORT AND LONG TERM.
JORDAN

URUGUAY

URUGUAY

UNCLASSIFIED

DEPARTMENT OF COMMERCE



INCOMING TELEGRAM

PAGE 01 006115 DCO916
31/2324Z
01/1655Z
INFO CCEA-00 OMB-01 [illegible] 4332-01 4330-01 6410-01 CEN-01

RR RUEHDC
DE RUEHMN #3186 1521949
ZNR UUUUU ZZH
R 311949Z MAY 84
FM AMEMBASSY MONTEVIDEO
TO RUEHC/SECSTATE WASHDC 1094
INFO RUEHDC/USDOC WASHDC
BT
UNCLAS MONTEVIDEO 03186

USDOC PASS BUCEN

E.O. 12356: N/A
TAGS: EAID, UY
SUBJ: ESCUELA DE ESTADISTICA APLICADA Y TECHNICAS DE COMPUTACION (ESAYTEC)

REF: STATE 113394

1. ECONOMIC COUNSELOR HAS CONTACTED ACTING DIRECTOR OF STATISTICS, DIRECCION GENERAL DE ESTADISTICAS, ABOUT ESAYTEC, WHO SAID THAT HE HAD NOT RECEIVED FABBRONI LETTER AS PER REFTEL AND WHO WAS UNAWARE OF THE ESAYTEC PROJECT. ACTING DIRECTOR WAS VERY INTERESTED IN THE PROPOSED SCHOOL AND THOUGHT IT WOULD BE VERY USEFUL, HOWEVER, HE SAID THAT HIS INSTITUTION WOULD BE UNABLE TO SEND ANYONE FOR TRAINING BEFORE THE END OF 1985 AS THE TIME OF ALL OF HIS STATISTICIANS WILL BE MONOPOLIZED BY 1985 NATIONAL CENSUS UNTIL THEN.
2. ECONOMIC COUNSELOR ALSO DISCUSSED PROJECT WITH THE DIRECTOR OF THE CENTRAL BANK'S DEPARTMENT OF STATISTICS WHICH IN FACT HAS MORE STATISTICIANS AND A LARGER STATISTICAL CAPABILITY THAN THE DIRECCION GENERAL DE ESTADISTICAS. DIRECTOR WAS ENTHUSIASTIC ABOUT PROPOSED PROJECT AND INDICATED BANK SHOULD BE ABLE TO SEND AT LEAST ONE STATISTICIAN FOR TRAINING AS SOON AS THE SCHOOL GETS UNDERWAY. ARANDA
BT
#3186

# VENEZUELA

Cable 5/22/84 - LIMITED OFFICIAL USE

U.S. Embassy to State Department

Transmitted statement of strong support by the Central Statistics Office and outline of training needs.

# ANNEX D

## USAID CABLES OF SUPPORT

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Department of State

INCOMING TELEGRAM

PAGE 01 TEGUCI 06654 172000Z 0631 044958 AID1974
ACTION AID-00

ACTION OFFICE LADR-03
INFO FPA-02 LACE-03 IT-06 COM-02 ISPC-01 RELO-01 MAST-01
DO-01 /020 A1 X17

INFO LOG-00 COPY-01 CIAE-00 EB-00 DODE-00 L-03 /012 W
121570 172042Z /70 38

P 171958Z MAY 85
FM AMEMBASSY TEGUCIGALPA
TO SECSTATE WASHDC PRIORITY 1398

UNCLAS TEGUCIGALPA 06654

AIDAC

PLEASE PASS TO LAC/DR/EST, DAVID EVANS AND MR. PRESTON BROWN/BUCEN - INTERNATIONAL STATISTICS PROGRAMS CENTER (ISPC)

12356: N/A
SUBJECT: TRAINING PERSPECTIVES FOR HONDURAN PARTICIPANTS TO ATTEND ESAYTEC COURSES

1. MISSION RECEIVED SUMMARY OF TRAINING NEEDS IDENTIFIED BY GOH INSTITUTIONS. TOTALS MAY HAVE TO BE REDUCED TO MORE MANAGEABLE FIGURES.

2. ALTHOUGH NO COST ESTIMATES WERE PROVIDED, AND MAY NOT BE AVAILABLE YET, MISSION FEELS THAT A VERY ROUGH ESTIMATE OF DOLS 2-300,000 MIGHT BE USED FOR THESE PURPOSES PER YEAR FOR THE NEXT 4 YEARS. WE DO NOT ANTICIPATE ANY TRAINING FOR FY 85, BUT A SMALL AMOUNT COULD BE USED IF ESAYTEC BEGINS OPERATIONS BEFORE END OF FISCAL YEAR.

3. IT WOULD BE VERY USEFUL THAT A FOLLOW-UP VISIT BY MR. BROWN BE MADE TO IDENTIFY PROSPECTIVE CANDIDATES AND INFORM GOH INSTITUTIONS OF ESAYTEC PROGRESS.
NEGROPONTE

92

UNCLASSIFIED

# Department of State

INCOMING TELEGRAM

PAGE 01 LIMA 00858 2414332 7146 051976 AID7463

ACTION AID-00

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ACTION OFFICE LADR-03
INFO STPI-01 LASA-03 LADP-04 PPDC-01 FM-02 STAG-02 SAST-01
COM-02 ISPC-01 RELO-01 MAST-01 /022 A4 324

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INFO OCT-00 CIAE-00 EB-08 DODE-00 ARA-00 /008 W
----------266357 2414342 /36

P 2414312 JAN 85
FM AMEMBASSY LIMA
TO SECSTATE WASHDC PRIORITY 1289

UNCLAS LIMA 00858

AIDAC

FOR: DAVID EVANS, LAC/DR/EST; SANDRA ROWLAND, DUCEN/ISPC

E.O. 12356: N/A
SUBJECT: MISSION INPUT TO PREPARATION OF ESAYTEC PROJECT PAPER (PROJECT 598-0636)

1. DURING MS. SANDRA ROWLAND'S OCTOBER TDY TO ASSIST IN THE IMPLEMENTATION OF THE AGRICULTURAL PLANNING AND INSTITUTIONAL DEVELOPMENT PROJECT, SHE PROVIDED BRIEFING ON THE PROPOSED ESCUELA DE ESTADISTICA APLICADA Y TECNICAS DE COMPUTACION (ESAYTEC). THIS CABLE PROVIDES DETAILS REQUESTED BY MS. ROWLAND FOR USE IN PREPARATION OF THE PROJECT PAPER.

2. THE MISSION BELIEVES THAT HIGH PRIORITY SHOULD BE ATTACHED TO THE ESAYTEC PROJECT. IT WILL HELP MEET A CRITICAL NEED FOR APPLIED TRAINING IN THE SPANISH LANGUAGE IN THE AREAS OF APPLIED STATISTICS AND DATA PROCESSING. THE STATISTICAL DATA BASE CURRENTLY AVAILABLE IN PERU FOR POLICY FORMULATION AND PROGRAM IMPLEMENTATION CONTAINS SERIOUS GAPS AND PROBLEMS IN TERMS OF THE QUALITY, ACCURACY AND TIMELINESS OF DATA. THESE PROBLEMS ADVERSELY AFFECT GOP PLANNING CAPABILITIES AS WELL AS COMPLICATING THE DEVELOPMENT AND IMPLEMENTATION OF USAID PROJECTS. IN VIEW OF OUR ASSESSMENT OF GOP STATISTICAL CAPABILITY, ESAYTEC'S PROPOSED EMPHASIS ON TRAINING PROJECT MANAGERS AND DATA USERS, IN ADDITION TO STATISTICIANS AND DATA PROCESSING STAFF, IS VERY APPROPRIATE. THE EFFECTIVENESS OF THE TRAINING SHOULD BE FURTHER ENHANCED BY THE PROPOSED LINKAGE WITH SPECIFIC PROJECTS AND FOLLOWUP BY TEACHING STAFF.

3. THE MISSION DOES NOT HAVE A PARTICULAR PREFERENCE FOR SHORT-TERM VERSUS LONG-TERM TRAINING. SEMINARS AND WORKSHOPS OF UP ONE MONTH WOULD BE APPROPRIATE FOR CERTAIN TOPICS, WHILE LONGER-TERM COURSES WOULD BE NEEDED FOR COMPREHENSIVE TECHNICAL TRAINING, ESPECIALLY IN ADVANCED COMPUTER APPLICATIONS. THE TRAINING NEEDS QUESTIONNAIRE COMPLETED BY THE MINISTRY OF AGRICULTURE AT MS. ROWLANS'S REQUEST, FOR EXAMPLE, IDENTIFIES THE FOLLOWING TRAINING REQUIREMENTS DURING 1985-1988; FOR SHORT-TERM TRAINING, 23 PARTICIPANTS AND FOR COURSED OF 6-18 MONTHS IN DURATION, 24 PARTICIPANTS.

4. T THIS TIME THERE ARE SEVERALPROJECTS WITHIN THE OFFICES OF AGRICULTURE AND RURAL DEVELOPMENT AND HEALTH NUTRITION AND EDUCATION THAT HAVE NEED FOR SENDING PARTICIPANTS TO ESAYTEC. IF MORE DETAILED INFORMATION IN THIS REGARD IS NEEDED, PLEASE ADVISE US. ROUGH ESTIMATES OF THE NUMBER OF PARTICIPANTS AND AMOUNT OF FUNDING COULD BE PROVIDED.

5. MISSION WOULD LIKE TO BE KEPT INFORMED ABOUT THE PROGRESS OF THE ESAYTEC PROJECT. OGDEN

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DEPARTMENT OF COMMERCE

INCOMING
TELEGRAM

PAGE 01 SANTO 00654 1814312 004845 DCE923
ACTION ARA-00 18/1520Z
18/1658Z

INFO CCEN-01 OFS-01 4300-01 3018 01 6410-01 3130-01 4310-02
4320-02 4327-01 6420-01 CEM-01 /013 A2 Z018

INFO OCT-00 COPY-01 ADS-00 AID-00 EB-00 COME-00 /009 W
376513 18151Z /43

R 1718242 JAN 85
FM AMEMBASSY SANTO DOMINGO
TO SECSTATE WASHDC 3852

UNCLAS SANTO DOMINGO 0654

FOR BUCEN AND LAC/DR/EST (ATTENTION: D. EVANS)

E.O. 12356: N/A
SUBJECT: SUPPORT TO PROPOSED ESAYTEC TRAINING CENTER
1. LARGE PROPORTION OF TRAINING NEEDS EXPRESSED BY GODR INSTITUTIONS IN WAY OF REQUESTS FOR USAID FINANCING ARE CONCENTRATED IN THE AREAS OF DATA PROCESSING, SAMPLING SURVEYS, AND DATA ANALYSIS. CENTRAL BANK IS PRESENTLY INITIATING NEW FAMILY EXPENDITURE HOUSEHOLD SURVEY IN ORDER TO ESTABLISH NEW BASE FOR CONSUMER PRICE INDEX. ADDITIONAL TRAINING WILL BE NEEDED FOR ITS STAFF TO SUCCESSFULLY CARRY OUT THIS SURVEY. UNFORTUNATELY BECAUSE OF LIMITED ANALYTICAL CAPABILITY, DATA CONTAINED IN 1977 SURVEY HAS NOT YET PROPERLY BEEN ANALYZED. POPULATION AND AGRICULTURAL CENSUS DATA TAKEN DURING 1980 AND 1981 ARE STILL UNDERUTILIZED BECAUSE OF NON-EXISTENT OR POOR PROGRAMMING CAPABILITY IN THE STATISTICAL OFFICE (ONE). AVAILABILITY OF PROPOSED ESAYTEC TRAINING OPPORTUNITIES WILL ASSIST THE GOVERNMENT ON OBTAINING FASTER AND MORE RELIABLE INFORMATION FOR PLANNING AND DECISION-MAKING PURPOSES.
2. DURING THE LAST 2 YEARS, USAID/DR HAS SPONSORED 8 PARTICIPANTS TO VARIOUS BUCEN TRAINING COURSES CONDUCTED IN ENGLISH. IN ADDITION, USAID HAS FINANCED PARTICIPANTS TO SEVERAL COURSES SPONSORED BY OTHER USG INSTITUTIONS INVOLVED IN STATISTICAL TRAINING. REQUESTS FOR FINANCING OF SUCH TRAINING HAVE INCREASED, BUT LANGUAGE AND LIMITED TRAINING FUNDS HAVE BEEN MAJOR BOTTLENECKS IN INCREASING D.R. PARTICIPATION IN TRAINING PROGRAMS. MEMBERS OF THE CENTRAL BANK, PLANNING

OFFICE, STATISTICAL OFFICE AND OTHER MINISTRIES WOULD BENEFIT FROM THIS TRAINING. THE NEED TO INCREASE THIS SUPPORT IS MORE PRESSING BECAUSE OF RECENT INSTALLATION OF COMPLEX MONETARY EXCHANGE SYSTEM AND MORE FLUCTUATION IN INFLATION.
3. OF THE PROPOSED TRAINING PROGRAMS IN THE DRAFT PP, USAID/DR BELIEVES THE SHORT-TERM (UP TO 6 MONTHS) COURSES IN SAMPLE SURVEYING AND DATA PROCESSING WILL BE THE ONES MOST UTILIZED IN THE PRESENT STATISTICAL STRUCTURES OF THE PUBLIC AND PRIVATE SECTORS IN THE DOMINICAN REPUBLIC. AVAILABILITY OF SUCH TRAINING IN SPANISH WOULD ENHANCE SEVERAL ONGOING AID PROJECTS (SUCH AS RURAL SAVING MOBILIZATION, FORESTRY MANAGEMENT, NARMA) WHERE CRITICAL NEED EXISTS FOR COMPETENCE IN THE AREAS OF COMPUTER PROGRAMMING AND DATA ANALYSIS.
4. WHILE USAID/DR DOES NOT POSSESS UNLIMITED TRAINING RESOURCES AND CANNOT GUARANTEE NUMBERS OF PARTICIPANTS TO ESAYTEC, CREATION OF SUCH A CREDIBLE REGIONAL-USE INSTITUTION WE FEEL IS IMPORTANT. IN ADDITION TO THOSE DIRECT PROJECT-RELATED NEEDS MENTIONED ABOVE, MOST CERTAINLY, GODR STATISTICIANS AND ECONOMISTS AT CENTRAL BANK AND THE OFFICE OF NATIONAL INCOME ACCOUNTS COULD AND WILL DIRECTLY BENEFIT. USAID/DR IS PREPARED TO PROGRAM PARTICIPANTS AS SOON AS INSTITUTION OPERATIONAL.
5. MISSION REQUESTS UPDATED STATUS OF REGIONAL ESAYTEC PROJECT AND BEST ESTIMATES OF AVAILABILITY FOR D.R. PARTICIPANTS.
ANDERSON

PAGE 01 LA PAZ 00195 1814282 8318 041447 AID5287
ACTION AID-00

ACTION OFFICE COM-02
INFO LASA-03 LADP-04 LADR-03 RELO-01 MAST-01 /014 A4 318

INFO OCT-00 CIAE-00 EB-00 DODE-00 ARA-00 /000 W
041544 1814222 /38

P 1814182 JAN 85
FM AMEMBASSY LA PAZ
TO SECSTATE WASHDC PRIORITY 3529

UNCLAS LA PAZ 00195

AIDAC

DEPT PASS TO BUREAU OF CENSUS, TIM BROWN

FOR ALLAN BROEHL, LAC/DR/EST

E.O. 12356: N/A
SUBJECT: ESCUELA DE ESTADISTICA APLICADA Y TECNICAS
- DE COMPUTACION (ESAYTEC)

REF: (A) TBROWN/GARVELINK TELCON DTD. 01.02.85,
- (B) TBROWN/LBROWN TELCON DTD. 01.08.85,
-. (C) LEON DE VIVERO/BROEHL MEMO DTD. 06.19.84,
- (D) 84 LA PAZ 04149, (E) 84 LA PAZ 02432

1. PER REFS (A) AND (B) REQUESTS, USAID/B FORMAL POSITION IS THAT SUBJECT PROJECT, ONCE FORMALIZED, IS RELEVANT AND IMPORTANT TO THE OVERALL DEVELOPMENT EFFORT IN BOLIVIA. THE HIGH GOB INTEREST IN THE TYPES OF TRAINING TO BE OFFERED UNDER THE PROJECT WAS CLEARLY EXPRESSED IN REFS (C), (D) AND (E) AND REMAINS FIRM. THE USAID/B INTEREST IN THE PROJECT, AS WELL AS POSSIBLE LIMITED COMPLEMENTARY FUNDING SOURCES FROM ONGOING PROJECTS, WAS FULLY DISCUSSED WITH BUCEN TECHNICIAN SANDRA ROWLAND DURING HER RECENT 11/84 TDY.

2. FYI, IN-COUNTRY BUCEN TECHNICIAN LOYD BROWN ANTICIPATES HAVING RECEIVED COMPLETED QUESTIONNAIRES FROM HOST COUNTRY ORGANIZATIONS REQUESTED BY ROWLAND BY 01.11.85. THESE WILL BE SUBSEQUENTLY FORWARDED TO BUCEN AND LAC/DR/EST. IN WORKING WITH HOST COUNTRY ORGANIZATIONS IN COMPLETING THESE QUESTIONNAIRES, USAID/B INFORMS THAT THESE WILL RECONFIRM HIGH GOB INTEREST IN ESAYTEC TRAINING COURSES IN THE AREAS OF DATA COLLECTION, PROCESSING AND ANALYSIS.
3. USAID/B REQUESTS BUCEN-LAC/DR/EST PERIODIC REPORTING ON FORMALIZATION STATUS OF SUBJECT PROJECT. THIS WILL PERMIT MISSION TO ADEQUATELY RESPOND TO GOB QUERIES.
CORR

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DEPARTMENT OF COMMERCE

INCOMING
TELEGRAM

PAGE 01 043587 BC0299
21/2158Z
22/0642Z
INFO OCEA-01 OPS-01 4380-01 3610-01 4320-02 4322-01 OES-01
/008 A1 8357

043587 BC0299

DE RUENDC
DE RUENTG 05785 3562149
ZNR UUUUU ZZH
R 212148Z DEC 84
FM AMEMBASSY TEGUCIGALPA
TO RUENDC/SECSTATE WASHDC 7848
INFO RUENDC/USDOC WASHDC
RUEVDFL/USDA WASHDC
BT
UNCLAS TEGUCIGALPA 15785

AIDAC

PASS TO TIM BROWN (BUCEN/ISPC)
FOR DAVID EVANS (AAC/DR/EST)

E.O. 12356: N/A
SUBJECT: MISSION INPUT TO PREPARATION OF ESAYTEC
- PROJECT PAPER

1. MISSION STAFF WERE BRIEFED BY MR. TIM BROWN OF THE BUREAU OF CENSUS (BUCEN) ON THE PROPOSED ESCUELA DE ESTADISTICA APLICADA Y TECNICAS DE COMPUTACION (ESAYTEC). MEETINGS WERE ARRANGED FOR MR. BROWN WITH REPRESENTATIVES OF GOH AGENCIES RESPONSIBLE FOR PRODUCING AND USING STATISTICS, WITH REPRESENTATIVES OF MULTILATERAL DONOR ORGANIZATIONS, PRIVATE CONSULTING FIRMS, THE PAN AMERICAN AGRICULTURAL SCHOOL AT ZAMORANO AND THE NATIONAL UNIVERSITY. THE PURPOSE OF MR. BROWN'S VISIT WAS TO COLLECT INFORMATION RELATING TO EFFECTIVE DEMAND FOR THE TRAINING TO BE OFFERED BY ESAYTEC AND TO DETERMINE PRIORITIES WITH RESPECT TO THE CONTENT AND DURATION OF TRAINING.

2. THE MISSION BELIEVES THAT THE ESAYTEC PROJECT ADDRESSES CRITICAL NEEDS IN THE AREA OF DATA COLLECTION, PROCESSING, AND ANALYSIS.

IN VIEW OF THE POOR TRACK RECORD OF THE GOH IN PRODUCING TIMELY STATISTICS AND USING THEM EFFECTIVELY IN POLICY FORMULATION AND PROJECT PLANNING, WE BELIEVE THAT THE PROJECT'S EMPHASIS ON TRAINING PROJECT MANAGERS AND DATA USERS IS VERY APPROPRIATE. THE PROPOSED EMPHASIS ON TRAINING TIED TO SPECIFIC PROJECTS, WITH FOLLOW-UP VISITS BY TEACHING STAFF, SHOULD FURTHER ENHANCE THE PROGRAM'S EFFECTIVENESS.

3. AS WAS REPEATEDLY COMMENTED BY BOTH HONDURAN AND USAID PERSONNEL, A SUBSTANTIAL PORTION OF THE TRAINING CONDUCTED BY ESAYTEC SHOULD CONSIST OF SHORT SEMINARS OR WORKSHOPS CONDUCTED IN-COUNTRY OR AT THE SUBREGIONAL LEVEL. THIS IS PERCEIVED AS PARTICULARLY CRITICAL DURING THE INITIAL PHASES OF THE PROJECT, IN ORDER TO BUILD AN INDIGENOUS EFFECTIVE DEMAND FOR LONGER TERM TRAINING IN THE U.S. WHILE THERE ARE MANY ADVANTAGES TO CONDUCTING COURSES IN WASHINGTON, THE HIGH COST OF SUCH TRAINING WOULD LIMIT THE NUMBER OF FELLOWSHIPS WHICH THIS MISSION COULD PROVIDE, AND CURRENT GOH POLICY IS TO LIMIT DOLLAR EXPENSES ON TRAINING OUTSIDE HONDURAS.

4. IT IS NOT POSSIBLE AT THIS TIME TO SPECIFY WHAT LEVEL OF FELLOWSHIP SUPPORT CAN BE PROVIDED FOR ESAYTEC TRAINING. HOWEVER, IT IS LIKELY THAT SOME FELLOWSHIPS WILL BE AVAILABLE FOR WASHINGTON - BASED TRAINING FROM JACKSON PLAN FUNDS. THE POSSIBILITY OF PROVIDING FELLOWSHIPS FROM PROJECT FUNDS WILL BE CONSIDERED AFTER WE HAVE REVIEWED THE COMPLETED TRAINING NEEDS QUESTIONNAIRIES WHICH MR. BROWN HAS DISTRIBUTED TO GOH AGENCIES, AND REVIEWED NEEDS FOR ESAYTEC TYPE TRAINING IN LIGHT OF OTHER EDUCATIONAL AND TRAINING DEMANDS. LOWMAN
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ADM AID

FOR LAC/DR/HN-CDABBS

E.O. 12356: N/A
SUBJECT: US CENSUS BUREAU TRAINING PROGRAM IN APPLIED STATISTICS AND DATA PROCESSING TECHNOLOGY

1. MISSION RECEIVED THE EXECUTIVE SUMMARY OF A PROPOSAL DEVELOPED BY THE US CENSUS BUREAU IN COLLABORATION WITH ORGANIZATION OF AMERICAN STATES FOR SPANISH LANGUAGE TRAINING IN SEVERAL PRACTICAL AREAS OF SURVEY TECHNIQUES AND DATA ANALYSIS. THE PROPOSAL IS DATED OCTOBER 9, 1984.

2. A NUMBER OF THE COURSES PRESENTED IN THIS PROPOSAL ARE OF HIGH INTEREST TO MOH AND DIRECTLY COMPLEMENT MISSION FINANCED EFFORTS.

3. REQUEST YOUR ASSISTANCE IN ACERTAINING IF DATES AND LOCATIONS FOR COURSES HAVE BEEN ESTABLISHED AND WHAT FINANCING ARRANGEMENTS ARE MADE. CONTACT PERSON IS TIM BROWN/ISPC/US BUREAU OF CENSUS. NEGROPONTE

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Department of State

INCOMING

TELEGRAM

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AIDAC

FOR DAVID EVANS, LAC/DR/EST

E.O. 12356: N/A
SUBJECT: CENSUS BUREAU ESAYTEC TRAINING PROPOSAL

1. MISSION UNABLE TO RESPOND DIRECTLY TO THE QUESTIONNAIRE BROUGHT BY TIM BROWN DURING HIS VISIT SOME MONTHS AGO AS AVAILABLE PROGRAM AND TRAINING OFFICE STAFF ARE CURRENTLY INTENSELY OCCUPIED WITH PREPARATION OF THE FY 1985 AND SUBSEQUENT YEARS' JACKSON PLAN TRAINING PROPOSALS. HOWEVER, MISSION HAS INVESTIGATED POSSIBILITIES OF USING THE TRAINING SERVICES OF THE ESAYTEC PROGRAM. ALTHOUGH WE DO NOT ENVISION ANY SPECIFIC TRAINING FOR 1985, WE ARE LOOKING MORE CLOSELY AT TRAINING NEEDS IN 1986 AND BEYOND. IN THIS RESPECT, IT IS WORTH NOTING THAT GUATEMALA'S MINISTRY OF ECONOMY HAS ESTABLISHED IN THE LAST MONTH A NATIONAL STATISTIC INSTITUTE AND THAT THIS INSTITUTION WILL LIKELY NEED SOME TRAINING FOR ITS PERSONNEL. WE PLAN TO HAVE DIRECT CONTACT WITH THE INSTITUTE AND IF TRAINING IS REQUIRED TO INCORPORATE IT UNDER THE JACKSON PLAN. PIEDRA

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Department of State

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TELEGRAM

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AIDAC

FOR ALLAN BROEHL LAC/DR

E.O. 12356: N/A
SUBJECT: ESCUELA DE ESTADISTICA APLICADA Y TECNICAS DE COMPUTACION (ESAYTEC)

REF.: (A) STATE 071417 (B) 080655

1. USAID/PANAMA IS INTERESTED TO FIND OUT PRESENT STATUS OF ANNOUNCED ESTABLISHMENT OF SUBJECT SCHOOL IN WASHINGTON D.C. THE GOVERNMENT OF PANAMA IS INTERESTED IN SENDING SOME PARTICIPANTS. PLEASE PROVIDE ALL DETAILS ASAP. BRIGGS

# ANNEX E

## TENTATIVE CURRICULUM OUTLINE

TENTATIVE CURRICULUM OUTLINE

The purpose of this outline is to provide a better understanding of the content of the training proposed under this project. The actual content of the activities listed below will not be finalized until the project is underway and detailed curriculum development has been carried out. Therefore, the information presented here should be considered preliminary. The activities listed are among those that are most likely to be offered during the first 2 years of the project.

A. SEMINARS AND WORKSHOPS

Title: Applications of Microcomputer Technology in Statistical Organizations

Duration: 2-3 weeks

Target Audience: Professionals involved in data processing, management or analysis in statistical offices.

Description: Participants will acquire an understanding of microcomputer hardware and software concepts, how to select hardware, how to determine when the use of microcomputers is appropriate, and how to plan for their introduction. The workshop also will include practice using several software packages on representative microcomputers.

Title: Use of Data for Social and Economic Policymaking

Duration: 2-3 weeks

Targe Audience: Executives and managers responsible for using or producing data for planning and policymaking.

Description: Provides an overview of informational requirements for development planning and for project monitoring and evaluation. The following topics are treated in detail: defining data needs and communciating them to statisticians; effective presentation and dissemination of data to users; and use of social and economic statistics in policy analysis. Emphasis is placed on exchange of information between data producers and data users who participate in the workshop.

Title: Design and Implementation of Health Information Systems

Duration: 2 weeks

Target Audience: Managers and senior technicians responsible for producing health statistics and users of health statistics.

Description: Presents principles of information systems development and relates them to health statistics in developing countries. Topics receiving special emphasis include developing a dialogue among data users, data collectors, and data processing staff; defining informational requirements; integrating health statistics into the national statistical system; and computer and microcomputer applications for processing, presenting, and disseminating health information.

SEVEN-MONTH MODULAR PROGRAMS

ECONOMIC DEVELOPMENT STATISTICS

| | Classroom Hours |
|---|---|
| **Module 1 (3 months) -- Basic Training for Economic Statisticians** | |
| Part One (1 month): | |
| Microeconomic Concepts for Statisticians | 20 |
| Elements of Economic Surveys/Censuses | 20 |
| Introduction to Satistical Methods | 20 |
| Geography and Mapping for Surveys and Censuses | 20 |
| | 80 |
| Part Two (2 months): | |
| Macroeconomic Concepts for Statisticians | 20 |
| Selected Topics in Economic Surveys/Censuses | 10 |
| Small-Scale and Household Industries | 10 |
| Measures of Economic Activity | 20 |
| Questionnaire and Table Design | 30 |
| Introduction to Computer Data Processing | 15 |
| Introduction to Survey Sampling | 30 |
| Intermediate Statistical Methods | 25 |
| | 160 |
| **Module 2 (2 months) -- Intermediate Training for Economic Statisticians** | |
| Foreign Trade Statistics | 20 |
| Selected Topics in Economic Statistics | 10 |
| Use of Microcomputers in Survey-Census Operations | 20 |
| Regression and Correlation Analysis | 20 |
| Quality Control of Survey-Census Operations | 20 |
| Editing, Coding and Imputation Techniques | 25 |
| Preparation of Operational Documentation and Computer Processing Specifications | 20 |
| Independent Project | 25 |
| | 160 |
| **Module 3 (2 months) -- Administration and Management of Economic Statistics Programs** | |
| Role of Economic Statistics in National Development | 20 |
| Presentation and Publication of Data | 15 |
| Data Dissemination and User Interface | 15 |
| Fundamentals of Management | 20 |
| Hiring and Training of Field and Office Staff | 20 |
| Budgeting, Scheduling and Controlling Survey-Census Operations | 20 |
| Survey Evaluation Techniques | 25 |
| Independent Project | 25 |
| | 160 |

COMPUTER DATA SYSTEMS

| | Classroom Hours |
|---|---|
| **Module 1 (3 months) -- Introduction to Census-Survey Data Processing** | |
| Part One (1 month): | |
| Computer Data Processing Fundamentals | 30 |
| Fundamentals of Structured Programming | 30 |
| Introduction to Survey-Census Methdology | 20 |
| Introduction to Statistical Methods | 20 |
| | 100 |
| Part Two (2 months): | |
| Introduction to Structured COBOL | 60 |
| Microcomputer Applications for Statistical Processing | 30 |
| Generalized Editing and Imputation Concepts (CONCOR) | 50 |
| Analysis and Design of Management Information Systems | 40 |
| Introduction to Survey Sampling | 20 |
| | 200 |
| **Module 2 (2 months): -- Intermediate Training in Census-Survey Data Processing** | |
| Intermediate/Advanced Structured COBOL | 70 |
| Census Tabulation System (CENTS 4) | 50 |
| Implementation and Control of Management Information Systems | 50 |
| Preparation of Operational Documentation and Computer Processing Specifications | 20 |
| | 90 |
| **Module 3 (2 months) -- Data Processing Administration and Management** | |
| Fundamentals of Management | 20 |
| Project Management Techniques | 20 |
| Recruitment and Development of Data Processing Staff | 20 |
| Operation of a Computer Center | 40 |
| Selection, Procurement and Evaluation of Computer Hardware and Software | 25 |
| Data Base Management Systems | 40 |
| Independent Project | 25 |
| | 190 |

# ANNEX F

## ORGANIZATIONS SUPPLYING INFORMATION FOR THE ANALYSIS OF EFFECTIVE DEMAND

GUATEMALA

Organizations Contacted

USAID
ROCAP
Inter-American Development Bank
Pan-American Health Organization
United Nations Development Program
Organization of American States

Government of Guatemala

General Directorate of Statistics, Ministry of Economics
Division of Planning and Policy, National Planning Council
Sectoral Planning Unit, Ministry of Agriculture
General Directorate of Health Services, Ministry of Health
Sectoral Planning Unit, Ministry of Labor
Guatemalan Social Security Institute
General Secretariat for Economic Integration of Central America
Technical Directorate for the Budget
Sectoral Planning Unit, Ministry of Economy
National Institute for Municipal Development
Guatemala City Government
Federation of Coffee Cooperatives of Guatemala

Organizations Completing Training Needs Assessment Questionnaires

General Directorate of Statistics, Ministry of Economics
General Directorate of Health Services, Ministry of Health
Sectoral Planning Unit, Ministry of Agriculture

DOMINICAN REPUBLIC

Organizations Contacted

USAID
Inter-American Development Bank
United Nations Development Program
Organization of American States
American Chamber of Commerce of the Dominican Republic

Government of the Dominican Republic

National Statistical Office
National Planning Office
Central Bank
State Secretariat for Public Health and Social Services
Institute of Population and Development Studies
State Secretariat for Industry and Commerce
State Secretariat for Finance
State Secretariat for Education, Fine Arts and Culture
State Secretariat for Agriculture
National Council for Population and the Family

Organizations Completing Training Needs Assessment Questionnaires

National Statistics Office
National Planning Office
Department of Economic Studies, State Secretariat for Finance
Statistics Division, State Secretariat for Public Health and Social Services
Department of Statistics, State Secretariat for Education, Fine Arts and Culture
National Council for Population and the Family

HONDURAS

Organizations Contacted

USAID
Inter-American Development Bank
United Nations Development Program
Organization of American States
Pan-American Health Organization
National University of Honduras
Pan-American School of Agriculture
Association for Development of Agriculture and Industry

Government of Honduras

Ministry of Economics
National Planning Council
Central Bank of Honduras
Honduran Institute of Agriculture Marketing
Ministry of Natural Resources
Ministry of Public Education
Ministry of Public Health

Organizations Completing Training Needs Assessment Questionnaires

General Directorate of Statistics, Ministry of Economy
Technical Secretariat of the National Planning Council
Department of Economic Studies, National Agriculture Development Bank
Department of Statistics and Information, National Agrarian Institute
Planning Unit, Honduran Agriculture Marketing Institute
Planning Division, Ministry of Public Health
Department of Informatics, Ministry of Public Education
Department of Sectoral Planning, Ministry of Labor and Social Welfare
Directorate of Sectoral Planning, Secretariat of Natural Resources
Faculty of Economic Sciences, National Autonomous University of Honduras
Jose Cecilio del Valle University

PERU

Organizations Contacted

USAID
Inter-American Development Bank
Organization of American States

Government of Peru

National Statistical Institute
National Planning Institute
Ministry of Agriculture
Ministry ofEnergy and Mines
Ministry of Interior
Ministry of Health
Ministry of Housing
Ministry of Education
Ministry of Public Administration
Ministry of Commerce
Ministry of Economy and Finance
Ministry of Industry and Tourism
Ministry of Transport and Communications
Ministry of Fisheries
Ministry of Labor
Ministry of Justice
Ministry of Social Security

Organizations Completing Training Needs Assessment Questionnaires

National Institute of Statistics
Office of Statistics, Ministry of Agriculture
Office of Statistics and Informatics, Ministry of Education
Office of Statistics, Ministry of Housing and Construction
Directorate of Statistics, Ministry of Labor
Office of Statistics and Informatics, Ministry of Transportation and Communication
Office of Industrial Statistics, Ministry of Industry and Tourism
Office of Statistics and Informatics, Ministry of Justice
Office of Budget and Planning, Ministry of Fisheries

BOLIVIA

Organizations Contacted

USAID
Inter-American Development Bank
United Nations Development Program
Organization of American States
Food and Agriculture Organization

Government of Bolivia

National Statistical Institute
Ministry of Agriculture
Ministry of Education
Ministry of Labor
Ministry of Health
Chamber of Commerce
Ministry of Finance
Central Bank
Ministry of Mining and Metalurgy
Economic Policy Analysis Unit

Organizations Completing Training Needs Assessment Questionnaires

Questionnaires are not yet available.

ARGENTINA

Organizations Contacted

Commercial Section, U.S. Embassy
Pan-American Health Organization
Organization of American States
United Nations Development Program
Inter-American Development Bank
Institute for Latin American Integration
Inter-American Center for Revenue Studies
Inter-American Center for Social Development
Inter-American Center for Public Administration Training

Government of Argentina

National Institute of Statistics and Censuses
Ministry of Planning

Organizations Completing Training Needs Assessment Questionnaires

National Institute of Statistics and Censuses
Department of Economic Studies, National Foodgrain Council
Directorate of Health Statistics
Directorate of Mining
Division of Statistics, National Savings and Loan Board
Department of Statistics, Ministry of Education and Justice
Department of Statistics, Ministry of Labor and Social Security
Directorate of Information and Applied Research, Secretariat of Social Security
Department of Information and Statistics, Secretariat of Science and Technology
Department of Statistics, National Telecommunications Corporation
Department of Studies, General Directorate of Taxation
Department of Statistics, General Directorate of Revenue
Provincial Statistical Offices of the following provinces:
- Federal Capital
- Tucuman
- Posadas
- Cordoba
- Salta
- Mendoza
- Santa Cruz
- Formosa
- Santiago del Estero
- San Luis

URUGUAY

Organizations Contacted

Commercial Section, U.S. Embassy
Inter-American Development Bank
Organization of American States
United Nations Development Program
Pan-American Health Organization

Government of Uruguay

General Directorate of Statistics and Censuses
Central Bank

Organizations Completing Training Needs Assessment Questionnaire

General Directorate of Statistics and Censuses
Departments of Economic Research and Statistics, Central Bank
General Accounting Office, Ministry of Economy and Finance
National Directorate of Energy
Office of Educational Planning, Ministry of Education
Transportation Planning Unit, Ministry of Transportation
Department of Economics and Actuary, General Directorate of Social Security
Department of Statistics, National Fisheries Institute

VENEZUELA

Organizations Contacted

Organization of American States
Inter-American Development Bank
United Nations Development Program
Pan-American Health Organization
Central Office of Statistics and Informatics
National Planning Office
Central University of Venezuela

Venezuelan Government

Ministry of Education
Ministry of Energy and Mines
Ministry of Agriculture
Ministry of Labor
Foundation for Education and Industry
Central University of Venezuela

Organizations Completing Training Needs Assessment Questionnaires

Questionnaires not yet available.

# ANNEX G

# ANALYSIS OF EFFECTIVE DEMAND

ANNEX G

TABLE OF CONTENTS

## A. Scope and Purpose of This Analysis

The objective of this analysis is to address in detail four key questions raised during the PID review that related to the design and viability of this project. These include the following:

(1) What is the level of aggregate demand and what are the priority training topics;

(2) What is the desired duration of training;

(3) What is the optimal mix of Washington-based versus overseas courses; and

(4) Is there sufficient effective demand to achieve a financially viable program.

These issues are examined on the basis of three sources of information: training needs assessment questionnaires completed by potential beneficiary organizations; interviews with USAID's and other donor field representatives, and documents supplied by them; and information regarding past and future training levels extracted from administrative records. Most of this information was collected during the factfinding missions conducted by Census Bureau (BuCen) staff to eight countries during October to December 1984. Countries visited include Guatemala, Dominican Republic, Honduras, Peru, Bolivia, Argentina, Uruguay, and Venezuela. In each country an attempt was made to contact field representatives of all donor organizations, including USAID's, and all major host country agencies responsible for producing and/or using statistical data. Since the statistical system is very decentralized in most countries, a wide range of organizations were contacted (a list appears in Annex F).

The scope of this study is limited to public sector organizations because of the lack of information on training needs and funding possibilities for private sector participation. Since only 1 week was spent in each country, time did not permit significant contacts with private firms. Only one private firm and two chambers of commerce were contacted. The decentralized nature of the private sector and its small size in many countries requires more time to collect the information needed. Whatever effective demand materializes from private firms would, therefore, be in addition to what is discussed in this analysis.

## B. Level of Demand Identified by Target Population

Training needs assessment questionnaires were distributed to likely beneficiary organizations in the eight countries visited during the demand study (a copy of the questionnaire is included in Appendix A). Fifty-nine questionnaires were returned from six countries. They were summarized and

analyzed in order to estimate the magnitude and characteristics of demand for this training. The questionnaire consists of the following sections:

Part A. General information on the organization;

Part B. Professional staffing levels and turnover during 1982 to 1984;

Part C. Projected staffing levels from 1985 to 1988;

Part D. Number of professional staff needing training from 1985 to 1988, by duration and topic of training; and

Part E. Priority training topics.

The information on turnover and priority training topics is unfortunately not useable since in most cases no response was given. However, the data on staffing levels and training needs by topic and duration was fairly complete.

Although it was not possible to visit a truly random sample of countries, an attempt was made to select a fairly representative group. The countries visited encompass low, medium and high levels of development. Different population sizes are similarly represented. Three of the eight are non-AID countries. While inferences cannot be made about the size and structure of total demand in the region, it is useful to examine the situation in this particular group of countries. At the very least, a large enough segment of the potential "market" has been explored to permit an evaluation of effective demand.

The information collected during the demand study on level and characteristics of demand is summarized in Tables 1 to 3 below.

1. Magnitude of Demand

With six of the eight countries responding, a total of 2347 professional staff were reported needing training over the 4-year period from 1985 to 1988. This is equivalent to 9614 person-months or 801 person-years of training. On average, each country would like to send 98 participants a year for a total of 400 person-months of training (person-months by year and country are shown in Appendix B). The magnitude of this demand suggests that there is indeed a large pent-up demand. The drop-off in training needs after the first 2 years is due in large part to the difficulty that responding organizations had in predicting training needs so far in advance. In many cases the questionnaire was left blank for 1987 and 1988 for number of staff needing training and for projected number of staff employed. Thus, there may be an underreporting of training needs for the 4-year period. In some cases it appears that respondents also underestimated future training needs resulting from staff turnover. Moreover, since only a certain proportion of this demand will actually be funded, these levels may be indicative of a bedrock of unmet demand that will continue into the 1990's.

TABLE 1. PERSON-MONTHS OF TRAINING NEEDED FOR PROFESSIONAL STAFF BY COUNTRY AND DURATION OF TRAINING: 1985-1988

| Country | Total | Short term (1-3 mo.) | Medium term (6 mo.) | Long term (10 mo.) | Percent Short Term |
|---|---|---|---|---|---|
| Total | 9614 | 2730 | 4404 | 2480 | 28% |
| Argentina | 2086 | 752 | 1014 | 320 | 36 |
| Uruguay | 418 | 248 | 90 | 80 | 59 |
| Guatemala[1] | 522 | 168 | 324 | 30 | 32 |
| Peru | 1798 | 464 | 924 | 410 | 26 |
| Honduras | 2266 | 542 | 1104 | 620 | 24 |
| Dominican Republic | 2524 | 556 | 948 | 1020 | 22 |

[1] Actual training needs for Guatemala are probably much greater since only three organizations completed questionnaires.

TABLE 2. TOTAL NUMBER OF PROFESSIONAL STAFF NEEDING TRAINING BY COUNTRY AND DURATION OF TRAINING: 1985-1988

| Country | Total | Short term (1-3 mo.) | Medium term (6 mo.) | Long term (10 mo.) | Percent Short Term |
|---|---|---|---|---|---|
| Total | 2347 | 1365 | 734 | 248 | 58% |
| Argentina | 577 | 376 | 169 | 32 | 65 |
| Uruguay | 147 | 124 | 15 | 8 | 84 |
| Guatemala[1] | 141 | 84 | 54 | 3 | 59 |
| Peru | 427 | 232 | 154 | 41 | 54 |
| Honduras | 517 | 271 | 184 | 62 | 52 |
| Dominican Republic | 538 | 278 | 158 | 102 | 52 |

[1] Actual training needs for Guatemala are probably much greater since only three organizations completed questionnaires.

TABLE 3. NUMBER AND PERCENTAGE OF PROFESSIONAL STAFF NEEDING TRAINING BY TOPIC OF TRAINING: 1985-1988

| Training Topic | Total 1985-1988 | | 1985 | | 1986 | | 1987 | | 1988 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Total, All Topics | 2347 | 100% | 766 | 100% | 672 | 100% | 486 | 100% | 423 | 100% |
| Sampling and Statistical Methods | 186 | 8 | 72 | 9 | 44 | 7 | 39 | 8 | 31 | 7 |
| Survey Methods and Mapping | 222 | 9 | 79 | 10 | 65 | 10 | 47 | 10 | 31 | 7 |
| Subtotal, Computer Data Systems | (711) | (30) | (231) | (30) | (203) | (30) | (144) | (30) | (133) | (32) |
| Programming and Programming Languages | 173 | 7 | 64 | 8 | 45 | 7 | 35 | 7 | 29 | 7 |
| Systems Analysis and Design | 123 | 5 | 36 | 5 | 40 | 6 | 23 | 5 | 24 | 6 |
| Data Base Management | 114 | 5 | 35 | 5 | 36 | 5 | 23 | 5 | 20 | 5 |
| Management Information Systems | 111 | 5 | 39 | 5 | 27 | 4 | 25 | 5 | 20 | 5 |
| Microcomputer Applications | 190 | 8 | 57 | 7 | 55 | 8 | 38 | 8 | 40 | 9 |
| Agriculture Statistics | 89 | 4 | 28 | 4 | 25 | 4 | 15 | 3 | 21 | 5 |
| Demographic Statistics | 91 | 4 | 33 | 4 | 28 | 4 | 16 | 3 | 14 | 3 |
| Health and Vital Statistics | 77 | 3 | 24 | 3 | 24 | 4 | 16 | 3 | 13 | 3 |
| Education Statistics | 77 | 3 | 29 | 4 | 23 | 3 | 14 | 3 | 11 | 3 |

(continued on next page)

| Training Topic | Total 1985-1988 | | 1985 | | 1986 | | 1987 | | 1988 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Per-cent | Number | Per-cent | Number | Per-cent | Number | Per-cent | Number | Per-cent |
| Economic Statistics | 173 | 7% | 49 | 6% | 50 | 7% | 40 | 8% | 34 | 8% |
| Foreign Trade Statistics | 60 | 3 | 23 | 3 | 16 | 2 | 13 | 3 | 8 | 2 |
| National Accounts | 67 | 3 | 24 | 3 | 19 | 3 | 13 | 3 | 11 | 3 |
| Training of Trainers | 63 | 3 | 21 | 3 | 15 | 2 | 15 | 3 | 12 | 3 |
| Organization and Management of Data Collection Operations | 72 | 3 | 30 | 4 | 17 | 3 | 15 | 3 | 10 | 2 |
| Project Management | 107 | 5 | 27 | 4 | 33 | 5 | 20 | 4 | 27 | 6 |
| Data Analysis | 218 | 9 | 68 | 9 | 65 | 10 | 46 | 5 | 39 | 9 |
| Data User Services | 96 | 4 | 20 | 3 | 29 | 4 | 26 | 5 | 21 | 5 |
| Other | 38 | 1 | 8 | 1 | 16 | 2 | 7 | 1 | 7 | 2 |

In designing the questionnaire used to collect this information, an attempt was made to ascertain training priorities given limited resources (see part E of questionnaire). However, this section was not filled in most cases. It was hoped that this data would help to put in context the rather wishful thinking that many of the responses to part D (total number of staff needing training) would represent. In any event, the numbers of persons reported needing training far exceed the funding that is likely to be available. Some caution should be used in interpreting the data; in some instances, organizations are expecting to train an unreasonably high proportion of staff, especially during the first 2 years. The figures were adjusted downward in these cases when there was a reasonable basis for doing so.

Nevertheless, it is clear that there is a high demand for this type of training, even though the figures reported may in some cases be inflated. In 1985 the six countries reported a total of 2182 professionals employed. Of these, 769 or 35 percent were reported as needing training in 1985. The percentage of professional employees needing training drops to 17 in 1988.

2. Desired Duration of Training

The questionnaire presented three alternatives with respect to the duration of training: short term, 1-3 months; medium term, 6 months; and long term, 10 months. These durations correspond to the options considered in the PID. Over the 1985-1988 period, the countries responding would send 58 percent of their trainees to short-term courses and 42 percent to programs lasting 6 or 10 months. However, of the total person-months of training needed, only 28 percent would be met by short-term programs. The proportion of short-term versus longer-term training remains roughly the same each year. The more developed countries report a greater need for short-term training than the less developed countries. For example, from 1985 to 1988, 36 percent of the person-months of training needed by Argentina would be met by short-term programs. Short-term training accounts for only 22 percent of the total reported by the Dominican Republic.

In summary, there is considerable interest in intensive training of 6 months or more.

3. Training Topics

Not surprisingly, the type of training needed by countries corresponds to their overall level of development. The more advanced countries report a

greater need for training in data analysis and sophisticated computer applications, whereas the lesser developed countries need training across the board. In terms of number of persons to be trained, the computer processing area accounts for 30 percent of the total for the 4-year period. The next four areas in order of importance are data analysis, survey methods and mapping, sampling and statistical methods, and economic statistics. These areas, together with computer processing, account for 63 percent of the persons that are reported needing training. The remainder are spread among a wide range of topics.

C. Donor Preferences for Content, Duration and Location of Training

1. U.S. AID Missions

All five USAID's visited have expressed interest in the project in interviews with BuCen staff and through follow-up cables to AID/W (see Annex D). And USAID/Panama, which was not visited, recently cabled requesting information on ESAYTEC. With the exception of USAID/Guatemala, all the missions visited see an immediate and strong need for the training that will be offered by ESAYTEC. The Guatemala mission was unable to provide the detailed response requested by the BuCen team but did cable interest in exploring training needs for FY 1986.

One conclusion is that the need for this training, as perceived by USAID's, cuts across all program sectors and encompasses a variety of training topics. The principal interest of USAID/Peru, for example, is in the rural development area. The USAID in Honduras expressed particular interest in ESAYTEC training to support health and nutrition programs and the next census of population.

With regard to the desired location and duration of training, USAID's in Peru and Bolivia prefer a mix of short- and longer-term courses conducted both in Washington and overseas. USAID/Dominican Republic predicts that courses lasting up to 6 months will best fit the needs of GODR institutions. The USAID in Honduras perfers that initially the training concentrate on short-term seminars and workshops offered in-country and subregionally. No information on these issues was provided by USAID/Guatemala.

2. Other Donors

The other donors visited include the United Nations Development Program (UNDP), Inter-American Development Bank (IADB), Organization of American States (OAS), and the Pan American Health Organization (PAHO). Not all were visited in all countries (see list of organizations contacted in Annex F). Few of the field representatives interviewed expressed a preference with respect to the duration and location of training. This was usually due to the fact that field offices have little or no authority in fellowship funding or policy decisions. Several of the UNDP and OAS representatives interviewed indicated a preference for short courses due to their lower cost.

Among the donor representatives who expressed an opinion on the type of training needed, there was surprising agreement as to the problems that countries face in the area of statistics and data processing. The principal problem they see is the lack of coordination and management throughout the statistical system. A number of specific problems were mentioned, including serious delays in releasing census and survey results, gaps and duplication in data sets, and numerous errors and inconsistencies in published data. These and similar comments were made by the UNDP and OAS in Venezuela, the IADB representative in the Dominican Republic, and donor representatives in Honduras and Peru.

D. Analysis of Effective Demand

A major concern expressed during the PID review was that there should be sufficient effective demand for this training to justify the expenditures required to establish a new program. Specifically, it should be demonstrated that long-term effective demand will be adequate to sustain the program after project funding is terminated at the end of the 3-year development period. A related concern is that USAID's should not be expected to be the primary source of fellowship funds over the long run.

During the demand study conducted by BuCen it was discovered that it is difficult to measure effective demand due to reluctance of donors to make funding commitments at this time. Most donors had never heard of ESAYTEC until contacted by the BuCen representative. The lead time normally required to evaluate program priorities and to add funding to the budget is obviously not available in this case. Moreover, donors are understandably reluctant to commit themselves to a program that has not yet started.

While it was proven difficult to establish actual effective demand at this time, it is possible to identify a level of potential demand sufficient to support the proposed training program. This finding is based on a review of historical funding patterns for similar programs, current levels of donor interest and known funding sources, and information on potential future sources of support. The following discussion is organized into four parts. The historical experience of the Census Bureau and Bureau of Labor Statistics programs is reviewed first, followed by consideration of known sources of funding and potential additional funding sources. This provides the basis for projecting the level of effective demand in the fourth part.

1. Census Bureau and BLS Experience

In attempting to predict the demand for this program it is very useful to examine the historical experience of comparable programs. Trends in the total level of donor funding and the distribution of funding among various donors provide a context within which effective demand can be studied. The most similar training program to the one being proposed is the English-language program conducted by BuCen for over 35 years. AID central funding of the BuCen program was terminated in 1978. Since then, the program has been fully self-sustaining on tuition fees and has steadily grown in size. More importantly, the program has successfully diversified its sources of financial support. The proportion of funding

provided by AID dropped from 90 percent in 1975 to 28 percent in 1984. The steadily decreasing reliance on AID funding and corresponding increase in other donor support is shown in Table 4.

The experience of the BLS program is similar and is summarized in Table 5. Sources of fellowship support have been diversified to the point that over the past 4 years AID accounted for 43 percent of the total. During the 4-year period 1973-1976, 56 percent of BLS fellowships came from AID.

This information lends support to two assumptions regarding the future effective demand for this project: (1) that sufficient aggregate demand can be generated to maintain a self-sustaining program and (2) that it will not be necessary to rely solely upon AID for fellowships.

It could be argued that the new program will have difficulty achieving self-sufficiency because it will have to compete with these and other programs already in exisitence. In view of the large pent-up demand for this training, as demonstrated previously, this is not likely to be a problem. More importantly, ESAYTEC will not compete directly with existing programs because it will offer training in areas not currently covered. The BuCen program is the only one offering the same type of training. So few Spanish-speaking LAC participants have attended in the past 5 years that there is little concern about direct competition.

TABLE 4. TRAINING LEVELS AND PERCENTAGE DISTRIBUTION OF FELLOWSHIP FUNDING OF CENSUS BUREAU PROGRAM: SELECTED YEARS

| Year | Total Person Months of Training | Percentage by Source | | | |
|---|---|---|---|---|---|
| | | AID | UN | Own Government | Other[1] |
| 1975 | 982 | 90 | - - Not Available - - | | |
| 1978 | 1085 | 42 | 20 | 33 | 4 |
| 1982 | 1101 | 31 | 20 | 35 | 13 |
| 1984 | 1178 | 28 | 24 | 30 | 19 |

[1] Due to the recordkeeping system used, fellowships received from a number of UN agencies are classified as "other." Therefore, most of these funds are from UN sources.

TABLE 5. TRAINING LEVELS AND PERCENTAGE DISTRIBUTION OF FELLOWSHIP FUNDING OF BUREAU OF LABOR STATISTICS PROGRAM: 1973-1984

| Period | Total Person Months of Training | Percentage by Source | | |
|---|---|---|---|---|
| | | AID | UN/ILO | Other |
| 1973-1976 | 313 | 56 | 12 | 32 |
| 1977-1980 | 715 | 50 | 17 | 33 |
| 1981-1984 | 805 | 43 | 15 | 42 |

2. Probable Sources of Funding

Probable sources of fellowship funds totaling $6.9 million over the next 4 years were identified among the AID and non-AID donors visited during the demand study (see Table 6). This amount includes only those projects with statistical or data use components, or general-purpose training projects, that were specifically mentioned by donors as possible sources of funds. The $6.9 million includes $1.0 million tentatively committed by USAID/ Tegucigalpa during the next 4 years. Although the rest of these funds are not committed to ESAYTEC and the proportion of funds that would actually be used for training is uncertain, these projects together represent a significant level of probable funding.

Another probable source of training funds for ESAYTEC, not included above, is the Central and Latin America Scholarship Program (CLASP). This proposed program will provide an average of almost $30 million per year over the next 5 years for U.S.-based training. If approved, this program will help to ensure sufficient funds while ESAYTEC is developing a broad base of long-term effective demand.

It is difficult to predict what amount of CLASP funds will be devoted to this project, however, the preliminary plans submitted by USAID's in Central America are encouraging. The allocation of funds by field of study appears to include a significant percentage of training in areas relating to statistics, data processing, and data analysis. In the fields of information systems and census demography, for example, the plans call for a total of 67 long-term trainees and 193 short-term trainees over 5 years. Several of the USAID's contacted have indicated in cables that they intend to use CLASP to fund fellowships for this project.

3. Potential Additional Sources of Funding

In addition to the probable sources of support discussed above, a number of other possibilities were identified in interviews with USAID and other donors. These can only be considered "potential" sources because no details were provided on the amount of funding or when it might be available. This information is summarized below.

USAID's:

Guatemala - Contacting National Planning Office to discuss support for creation of new centralized statistical office. GOG officially requested USAID support of ESAYTEC training for this purpose.

Honduras - Interest in microcomputer and management information systems training for health and nutrition projects.

Education and other offices interested in funding next population census (date not yet set).

TABLE 6. PROBABLE SOURCES OF FELLOWSHIP FUNDING BY DONOR AND YEAR: 1985-1988
(In thousands of dollars)

| Donor and Project | Total 1985-1988 | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|---|
| Total, All Donors | 6870 | 1875 | 2545 | 1300 | 1150 |
| UNFPA/Bolivia, Training in support of population census | 400 | 200 | 200 | | |
| UNDP/Guatemala, Statistical development project | 400 | | 200 | 200 | |
| UNDP/Honduras, Support of population census | 500 | | 150 | 150 | 200 |
| UNDP/Venezuela, Agriculture statistics project | 70 | 70 | | | |
| PAHO/Venezuela, Health statistics project | 60 | 60 | | | |
| USAID/Tegucigalpa | 1000 | 250 | 250 | 250 | 250 |
| USAID/Dominican Republic, Training levels for various projects with statistical components | 2280 | 715 | 1165 | 200 | 200 |
| USAID/Bolivia | | | | | |
| Training for Development Project | 2000 | 500 | 500 | 500 | 500 |
| Policy Reform Project | 160 | 80 | 80 | | |

Bolivia - Interest expressed by population officer in various types of training.

General mission interest in training for institution-building.

Dominican Republic - Interested in training to strengthen GODR current statistics and national accounts data.

Peru - Office of Rural Development interest in various types of training.

OTHER DONORS:

OAS/Regional - Interest in ESAYTEC training to support ongoing and planned projects designed to assist countries in developing microcomputer-based information systems.

IADB/Dominican Republic - Interest in this training to help strengthen key GODR institutions in six different sectors.

UNDP/Venezuela - Strong interest in including ESAYTEC training in a large project to design an information system for agriculture production statistics. Project begins in 1986.

PAHO/Guatemala - Interest in strengthening health information systems; training needed in design of management information systems and micro-computers.

The non-AID donors are a potentially large source of funds that will require time to tap successfully. The reluctance of field representatives to discuss specifics is due in large part to the fact that training funds are programmed by headquarters staff. Headquarters staff generally make periodic programming missions to the countries and, together with resident staff, meet with counterparts to determine the allocation of funds for the next budget cycle. Requests by host country officials for funding of specific programs plan an important part in deciding how monies are allocated.

Thus, two prerequisites for obtaining funds from these other donors are currently missing; requests from the countries and support for this project from headquarters staff. The numerous contacts made by BuCen staff with host country officials and donor representatives are a good start that will bring returns in the future. Similarly, discussions underway between BuCen and donor headquarters staff will take time to bear fruit.

The 1990 round of population censuses is another area of potentially great demand for ESAYTEC training. The UN traditionally provides major support to census programs; $900,000 has already been earmarked for censuses in Honduras and Bolivia and is included in the estimates of probable funding

given above. Nine other target countries are planning to conduct population censuses within the next 6 years. There will be a growing need for training since preparations for a census begin years in advance of actual enumeration.

There are two further areas of potential funding that should be mentioned; the private sector and the recipient countries. The difficulty of establishing the level of private sector interest was discussed previously. A concerted effort will have to be made once the program is underway to secure private sector funding. No special effort was made during the demand study to determine what financial support the countries could provide. It would seem reasonable to expect countries to at least cover participant airfare after the project has begun. As economic conditions in the region improve, it is expected that a growing number of participants, particularly from the advanced countries, will be funded entirely by their own government. This has been the case over the past 5 years in the Census Bureau training program conducted in English (see Table 4).

4. Projection of Effective Demand

The foregoing discussion provides the basis for developing a series of assumptions upon which effective demand can be projected. These working assumptions are as follows:

(1) Significant funding will be available from USAID projects (excluding CLASP), ranging from 35 percent of annual fellowship requirements in FY 1986 to about 25 percent of the total in FY 1990.

(2) A modest amount of CLASP funds will be available for this project and will help take up slack until other sources can be fully tapped.

(3) Significant financial support will be available from multilateral donors and will eventually be greater than AID's contribution.

(4) It should be possible to obtain a substantial amount of funding from private firms.

(5) By 1990 it should be feasible to require countries to fund a portion of tuition costs, in addition to participant airfare.

An additional and very fundamental assumption is that the total effective demand is considerably larger when the entire target population is taken into account. This demand study covers only eight countries out of a total of 17 Spanish-speaking countries, plus Brazil. The multilateral donors have programs in all of these countries. There are four AID countries not covered in this analysis.

Table 7 below shows a projected level of fellowship funding by source for the period from FY 1986 to FY 1990. The numbers in the table constitute

TABLE 7. PROJECTED LEVEL AND SOURCE OF FELLOWSHIP FUNDING FOR ESAYTEC: FY 1986 - FY 1990
(In thousands of dollars)

| Source of Funds | Total FY 1986-FY 1990 | | FY 1986 | | FY 1987 | | FY 1988 | | FY 1989 | | FY 1990 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Amt. | % | Amt. | % | Amt. | % | Amt. | % | Amt. | % | Amt. | % |
| Total Funding Required[1] | 6746 | 100 | 86 | 100 | 967 | 100 | 1777 | 100 | 1910 | 100 | 2006 | 100 |
| CLASP | 791 | 12 | 21 | 25 | 242 | 25 | 356 | 20 | 172 | 9 | - | - |
| USAID Projects | 1695 | 25 | 31 | 35 | 242 | 25 | 444 | 25 | 477 | 25 | 501 | 25 |
| UN | 1881 | 28 | 21 | 25 | 242 | 25 | 462 | 26 | 554 | 29 | 602 | 30 |
| OAS, PAHO, IADB | 1089 | 16 | 13 | 15 | 145 | 15 | 284 | 16 | 306 | 16 | 341 | 17 |
| Countries and Private Sector | 1290 | 19 | - | - | 96 | 10 | 231 | 13 | 401 | 21 | 562 | 28 |

[1] Estimated level of fellowship funding needed for a self-sustaining program, including tuition fees and participant airfare and per diem. (From Annex H.)

one of many possible scenarios based on the above assumptions. However, the total levels of funding required are based on detailed budget projections done as part of the financial analysis (see Section III.C of the Project Paper).

Although it is obviously impossible to predict specific contributions of each sponsor, the analysis presented here demonstrates that the total effective demand for this program should be adequate. The information collected so far on probable sources of funding by itself provides a reasonable basis for predicting that actual effective demand will be sufficient. Assuming, for example, that only one quarter of the $6.9 million were actually made available to ESAYTEC, it would cover roughly 36 percent of anticipated fellowship costs during the first 4 years of operation. Since this information is based on an incomplete survey of donors in only 8 of the 18 target countries, total funding levels presumably would be much higher; high enough to support 100 percent of fellowship costs.

Apart from this, it can be stated with some degree of confidence that ESAYTEC will develop a diversified base of support such that AID will not be expected to provide more than a fair share of funding. However, it is also evident that a new program of this sort requires a number of years to establish a constituency and to fully develop all possible funding sources. A significant level of USAID fellowship support is essential while the program establishes other funding sources, as the current Census Bureau and BLS programs have so successfully done. The favorable response of USAID's to this project so far indicates that there will be no difficulty in this regard.

# APPENDIX A

## TRAINING NEEDS ASSESSMENT QUESTIONNAIRE

# CUESTIONARIO PARA EVALUAR LAS NECESIDADES DE ADIESTRAMIENTO DE ORGANISMOS PRODUCTORES Y USUARIOS DE DATOS

Nombre de esta organización: _____

Dirección: _____

_____

_____

Nombre de la persona o personas encargadas de llenar este cuestionario: _____

Cargo: _____

Teléfono: _____

---

## Propósito de este cuestionario

La información declarada en este cuestionario será utilizada por el personal de la Oficina del Censo de los EE.UU. para planificar las actividades de la Escuela de Estadística Aplicada y Técnicas de Computación (ESAYTEC). Este cuestionario será analizado conjuntamente con la información suministrada por las instituciones donantes para determinar las necesidades de su país y de otros países de Latinoamérica en materia de estadística y procesamiento de datos.

## Instrucciones para llenar este cuestionario

Empleados de nivel profesional: Todas las preguntas conciernen únicamente al personal de nivel profesional, o sea, a aquellas personas cuyos cargos implican trabajo de carácter técnico. Deben excluirse los oficinistas, codificadores, enumeradores, supervisores de campo, empleados auxiliares, etc.

Horario equivalente al horario completo: Toda la información relacionada con el número de empleados debe declararse en función del horario completo o su equivalente. Toda persona que por lo regular trabaje 40 horas o más semanales debe considerarse como empleado de horario completo. Los empleados de horario parcial deben cambiarse a equivalentes de horario completo en base a una semana de 40 horas laborables. Por ejemplo, el equivalente de dos personas que trabajan 20 horas semanales a tiempo parcial es una persona que trabaja a tiempo completo.

Si en esa organización la semana laborable regular es más o menos de 40 horas, utilice la semana regular como base para cambiar el horario parcial a horario completo.

PARTE A -- Informacíon General

1. Favor de indicar en forma breve las encuestas y los censos a cargo de este organismo (si es que haya).

| Nombre de Encuesta o Censo | Periodicidad/Año | Número Aproximado de Observaciones |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

2. Favor de indicar en forma breve el tipo de análisis de datos a cargo de este organismo (si es que haya).

_____

_____

_____

3. Sírvasa indicar los mayores problemas que se encontraron en la últims encuesta, censo, o programa de encuestas contínuas llevado a cabo por este organismo.

_____

_____

_____

4. Sírvase indicar las encuestas o los censos de mayor importancia que se llevará a cabo este organismo hasta el año 1990 (si es que haya).

| Nombre de Encuesta o Censo | Año | Número Aproximado de Observaciones |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

5. Favor de hacer cualquier otro comentario con respecto a las necesidades de capacitación de este organismo o respecto a la información proporcionada en este cuestionario.

6. Favor de adjuntar el organigrama y las descripciones de puesto para los puestos informados en las partes B y C a continuación.

**PARTE B — Número de profesionales Empleado, Vacancias y Retención de Personal: 1982-1984**

| Clasificación de Puesto (Favor de especificar) | 1984 (Hasta el 30 de septiembre) | | | | | 1983 | | | | | 1982 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Número Empleado a partir del 1 de enero | Número de puestos a partir del 30 de septiembre | | | Número total de empleados separados hasta el 30 de septiembre | Número Empleado a partir del 1 de enero | Número de puestos a partir del 31 de diciembre | | | Número total de empleados separados durante el año | Número Empleado a partir del 1 de enero | Número de puestos a partir del 31 de diciembre | | | Número total de empleados separados durante el año |
| | | Con Presupuesto Autorizado | Llenado | Vacante debido a falta de personal calificado | | | Con Presupuesto Autorizado | Llenado | Vacante debido a falta de personal calificado | | | Con Presupuesto Autorizado | Llenado | Vacante debido a falta de personal calificado | |
| Total: Todos puestos[1] | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 1. _____ | | | | | | | | | | | | | | | |
| 2. _____ | | | | | | | | | | | | | | | |
| 3. _____ | | | | | | | | | | | | | | | |
| 4. _____ | | | | | | | | | | | | | | | |
| 5. _____ | | | | | | | | | | | | | | | |
| 6. _____ | | | | | | | | | | | | | | | |
| 7. _____ | | | | | | | | | | | | | | | |
| 8. _____ | | | | | | | | | | | | | | | |
| 9. _____ | | | | | | | | | | | | | | | |
| 10. _____ | | | | | | | | | | | | | | | |

[1] Favor de adjuntar descripciones de puestos.

PARTE C -- Número Proyectado de Profesionales Empleado: 1985-1988

| Clasificación de Puesto (favor de especificar) | 1985 | 1986 | 1987 | 1988 |
|---|---|---|---|---|
| Total: Todos puestos | | | | |
| 1. | | | | |
| 2. | | | | |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |

PARTE D -- Número de Personal Profesional Que Necesita Capacitación Según Tipo y Duración de la Misma: 1985-1988

| TIPO DE CAPACITACION | Número de Personal Profesional | | | | | |
|---|---|---|---|---|---|---|
| | 1985 | | | 1986 | | |
| | Corto Plazo (1-3 m.) | Medio Plazo (6 meses) | Largo Plazo (10 meses) | Corto Plazo (1-3 m.) | Medio Plazo (6 meses) | Largo Plazo (10 meses) |
| Muestreo y métodos estadisticos | | | | | | |
| Metodología de encuestas (elaboración de cuadros, formularios, manuales,etc.) | | | | | | |
| Sistemas de computación: Programación y Lenguajes | | | | | | |
| Análisis y diseño de sistemas | | | | | | |
| Administración de base de datos | | | | | | |
| Sistemas de información para admin. | | | | | | |
| Aplicaciones de microcomputadoras | | | | | | |
| Estadísticas agrarias | | | | | | |
| Estadísticas demográficas | | | | | | |
| Estadísticas vitales y de salud | | | | | | |
| Estadísticas de educación | | | | | | |
| Estadísticas económicas | | | | | | |
| Estadísticas de comercio exterior | | | | | | |
| Contabilidad nacional | | | | | | |
| Cartografía para censos y encuestas | | | | | | |
| Capacitación de instructores | | | | | | |
| Organización y admin. de labores de campo | | | | | | |
| Técnicas de admin. de proyectos | | | | | | |
| Análisis de datos | | | | | | |
| Adiestramiento de usuarios | | | | | | |
| Otro (favor de especificar) | | | | | | |

PARTE D -- (continuación)

| TIPO DE CAPACITACION | Número de Personal Profesional | | | | | |
|---|---|---|---|---|---|---|
| | 1987 | | | 1988 | | |
| | Corto Plazo (1-3 m.) | Medio Plazo (6 meses) | Largo Plazo (10 meses) | Corto Plazo (1-3 m.) | Medio Plazo (6 meses) | Largo Plazo (10 meses) |
| Muestreo y métodos estadísticos | | | | | | |
| Metodología de encuestas (elaboración de cuadros, formularios, manuales,etc.) | | | | | | |
| Sistemas de computación: Programación y Lenguajes | | | | | | |
| Análisis y diseño de sistemas | | | | | | |
| Administración de base de datos | | | | | | |
| Sistemas de información para admin. | | | | | | |
| Aplicaciones de microcomputadoras | | | | | | |
| Estadísticas agrarias | | | | | | |
| Estadísticas demográficas | | | | | | |
| Estadísticas vitales y de salud | | | | | | |
| Estadísticas de educación | | | | | | |
| Estadísticas económicas | | | | | | |
| Estadísticas de comercio exterior | | | | | | |
| Contabilidad nacional | | | | | | |
| Cartografía para censos y encuestas | | | | | | |
| Capacitación de instructores | | | | | | |
| Organización y admin. de labores de campo | | | | | | |
| Técnicas de admin. de proyectos | | | | | | |
| Análisis de datos | | | | | | |
| Adiestramiento de usuarios | | | | | | |
| Otro (favor de especificar) | | | | | | |

## PARTE E--Prioridades sobre el Tipo y Duración del Adiestramiento

Ya que el nivel de financiamiento disponible suele no ser suficiente para satisfacer todas las necesidades de adiestramiento, es necesario asignarles prioridades a tales necesidades. Para planificar el programa de la ESAYTEC, es importante tener alguna idea de cuáles son las prioridades de las diferentes instituciones en cuanto al tipo y duración del adiestramiento.

Una manera de lograr este objetivo es asignándole prioridades al uso de una cantidad hipotética de financiamiento para el adiestramiento. Considérense las siguientes suposiciones:

- Que varias instituciones donantes hayan aprobado un total de U.S. $60,000 para que la ESAYTEC proporcione adiestramiento anualmente durante el período de 1985 a 1988.

- Que el costo total del adiestramiento de corto plazo es de U.S. $3,000 por participante.

- Que el costo total del adiestramiento de plazo medio es de U.S. $12,000 por participante.

- Que el costo total del adiestramiento de largo plazo es de U.S. $18,000 por participante.

Instrucciones:

Sírvase indicar en el cuadro de la PARTE D el número de participantes que, en base a estas suposiciones, usted enviaría para que reciban adiestramiento. Anote el número en las celdas correspondientes del cuadro y haga un círculo alrededor de dicho número.

# APPENDIX B

## PERSON-MONTHS OF TRAINING NEEDED FOR PROFESSIONAL STAFF BY COUNTRY AND YEAR: 1985-1988

TABLE 1A. PERSON-MONTHS OF TRAINING NEEDED FOR PROFESSIONAL STAFF BY COUNTRY AND YEAR: 1985-1988

| Country | 1985 | | 1986 | | 1987 | | 1988 | |
|---|---|---|---|---|---|---|---|---|
| | Person Months | Percent Short-term[1] | Person Months | Percent Short-term[1] | Person Months | Percent Short-term[1] | Person Months | Percent Short-term[1] |
| Total | 3224 | 27% | 2744 | 29% | 1880 | 32% | 1766 | 27% |
| Argentina | 792 | 17 | 668 | 36 | 340 | 46 | 286 | 42 |
| Uruguay | 168 | 39 | 136 | 50 | 58 | 100 | 56 | 100 |
| Guatemala[2] | 208 | 33 | 170 | 31 | 86 | 37 | 58 | 27 |
| Peru | 602 | 27 | 520 | 26 | 348 | 30 | 328 | 18 |
| Honduras | 678 | 24 | 598 | 25 | 496 | 25 | 494 | 21 |
| Dominican Republic | 776 | 22 | 652 | 21 | 552 | 22 | 544 | 22 |

[1] Training of 1 to 3 months duration.

[2] Actual training needs for Guatemala are probably much greater since only three organizations completed questionnaires.

# ANNEX H

## BUDGET DETAIL BY FISCAL YEAR

TABLE 9A. TOTAL PROJECT COSTS BY FISCAL YEAR AND COST CATEGORY

| Description of Costs | Fiscal Year 1986 | 1987 | 1988 | 1989 | 1990 | Total FY 86-FY 90 |
|---|---|---|---|---|---|---|
| 1. Personnel Costs | | | | | | |
| 7-Month Technical Courses | | | | | | |
| Course Development Costs | 109260 | 87408 | 30047 | 30047 | - | 256762 |
| Instructional Costs | - | 78793 | 172101 | 248820 | 273702 | 773416 |
| Subtotal | 109260 | 166201 | 202148 | 278867 | 273702 | 1030178 |
| Workshops | | | | | | |
| Course Development Costs | 38241 | 13657 | 13657 | 13657 | - | 79212 |
| In-country instruction costs | 48694 | 56523 | 56523 | 84785 | 84785 | 331310 |
| U.S.-based instruction costs | 12441 | 24882 | 24882 | 24882 | 24882 | 111969 |
| Subtotal | 99376 | 95062 | 95062 | 123324 | 109667 | 522491 |
| Program Management and Support | 74710 | 94994 | 128243 | 162131 | 162411 | 622489 |
| Total Personnel Costs | 283346 | 356257 | 425453 | 564322 | 545780 | 2175158 |
| 2. Equipment, Supplies and Services | | | | | | |
| Microcomputers | 56750 | | | | | 56750 |
| Microcomputer software | 2000 | | | | | 2000 |
| Workstations and Pedestals | 2300 | | | | | 2300 |
| Modems | 2850 | | | | | 2850 |
| Microcomputer supplies | 2000 | | | | | 2000 |
| Subtotal | 65900 | | | | | 65900 |
| Simultaneous translation equipment | 9350 | | | | | 9350 |
| Overhead projectors | 1350 | 2025 | | | | 3375 |
| Porcelain boards, screens and lecturns | 750 | 1150 | | | | 1900 |
| Transparency machine | 770 | - | | | | 770 |
| Slide projector | - | 385 | | | | 385 |
| Folding tables | 1320 | 4400 | | | | 5720 |
| Chairs | 1050 | 3150 | | | | 4200 |
| Subtotal | 14590 | 11110 | | | | 25700 |
| Mainframe computer costs | 2000 | 23000 | 23000 | 23000 | 23000 | 94000 |
| Installation costs | 2000 | - | - | - | - | 2000 |
| Printing and postage | 6000 | 4000 | 4000 | 4000 | 4000 | 22000 |
| Translation Costs | 45000 | 55000 | 15000 | 15000 | 5000 | 135000 |
| Interpretors | - | 1500 | 6000 | 9500 | 9500 | 26500 |
| Language instruction | - | 3000 | 5000 | 6500 | 6500 | 21000 |
| Subtotal | 55000 | 86500 | 53000 | 58000 | 48000 | 300500 |
| Total | 135490 | 97610 | 53000 | 58000 | 48000 | 392100 |
| 3. Program Travel | 9020 | 9020 | 9020 | 9020 | 9020 | 45100 |
| 4. Agency overheads (31.22%) | 91275 | 114039 | 135643 | 178997 | 173209 | 693163 |
| 5. Contingency | 13000 | 30000 | 60000 | 124000 | 188000 | 415000 |
| TOTAL | 532131 | 607010 | 683181 | 934339 | 964009 | 3720670 |

TABLE 9B. PROJECTS COSTS SUPPORTED BY PROJECT FUNDS BY FISCAL YEAR AND COST CATEGORY

| Description of Costs | Fiscal Year 1986 | 1987 | 1988 | 1989 | 1990 | Total FY 86-FY 90 |
|---|---|---|---|---|---|---|
| 1. Personnel Costs | | | | | | |
| 7-Month Technical Courses | | | | | | |
| Course Development Costs | 109260 | 87408 | 30047 | 30047 | | 256762 |
| Instructional Costs | - | - | - | - | | - |
| Subtotal | 109260 | 87408 | 30047 | 30047 | | 256762 |
| Workshops | | | | | | |
| Course Development Costs | 38241 | 13657 | 13657 | 13657 | | 79212 |
| In-country instruction costs | - | - | - | - | | - |
| U.S.-based instruction costs | - | - | - | - | | - |
| Subtotal | 38241 | 13657 | 13657 | 13657 | | 79212 |
| Program Management and Support | 74015 | 78064 | 10529 | 32629 | | 195237 |
| Total Personnel Costs | 221516 | 179129 | 54233 | 76333 | | 531211 |
| 2. Equipment, Supplies and Services | | | | | | |
| Microcomputers | 56750 | | | | | 56750 |
| Microcomputer software | 2000 | | | | | 2000 |
| Workstations and Pedestals | 2300 | | | | | 2300 |
| Modems | 2850 | | | | | 2850 |
| Microcomputer supplies | 2000 | | | | | 2000 |
| Subtotal | 65900 | | | | | 65900 |
| Simultaneous translation equipment | 9350 | | | | | 9350 |
| Overhead projectors | 1350 | 2025 | | | | 3375 |
| Porcelain boards, screens and lecturns | 750 | 1150 | | | | 1900 |
| Transparency machine | 770 | - | | | | 770 |
| Slide projector | - | 385 | | | | 385 |
| Folding tables | 1320 | 4400 | | | | 5720 |
| Chairs | 1050 | 3150 | | | | 4200 |
| Subtotal | 14590 | 11110 | | | | 25700 |
| Mainframe computer costs | | | | | | |
| Installation costs | | | | | | |
| Printing and postage | | | | | | |
| Translation Costs | 45000 | 55000 | 15000 | 15000 | | 130000 |
| Interpretors | | | | | | |
| Language instruction | | | | | | |
| Subtotal | 45000 | 55000 | 15000 | 15000 | | 130000 |
| Total | 127490 | 66110 | 15000 | 15000 | | 221600 |
| 3. Program Travel | 9020 | 9020 | 9020 | 9020 | | 36080 |
| 4. Agency overheads (31.22%) | 71974 | 58741 | 19748 | 26647 | | 177110 |
| 5. Contingency | 2000 | 10000 | 10000 | 12000 | | 34000 |
| TOTAL | 430000 | 323000 | 108000 | 139000 | | 1000000 |

TABLE 9C. PROJECT COSTS FUNDED BY PROGRAM FEES, BY FISCAL YEAR AND COST CATEGORY

| Description of Costs | Fiscal Year 1986 | 1987 | 1988 | 1989 | 1990 | Total FY 86-FY 90 |
|---|---|---|---|---|---|---|
| 1. Personnel Costs | | | | | | |
| 7-Month Technical Courses | | | | | | |
| Course Development Costs | - | - | - | - | - | - |
| Instructional Costs | | 78793 | 172101 | 248820 | 273702 | 773416 |
| Subtotal | | 78793 | 172101 | 248820 | 273202 | 773416 |
| Workshops | | | | | | |
| Course Development Costs | - | - | - | - | - | - |
| In-country instruction costs | 48694 | 56523 | 56523 | 84785 | 84785 | 331310 |
| U.S.-based instruction costs | 12441 | 24882 | 24882 | 24882 | 24882 | 111969 |
| Subtotal | 61135 | 81405 | 81405 | 109667 | 109667 | 443279 |
| Program Management and Support | 695 | 16930 | 117714 | 129502 | 162411 | 427252 |
| Total Personnel Costs | 61830 | 177128 | 371220 | 487989 | 545780 | 1643947 |
| 2. Equipment, Supplies and Services | | | | | | |
| Microcomputers | | | | | | |
| Microcomputer software | | | | | | |
| Workstations and Pedestals | | | | | | |
| Modems | | | | | | |
| Microcomputer supplies | | | | | | |
| Subtotal | | | | | | |
| Simultaneous translation equipment | | | | | | |
| Overhead projectors | | | | | | |
| Porcelain boards, screens and lecturns | | | | | | |
| Transparency machine | | | | | | |
| Slide projector | | | | | | |
| Folding tables | | | | | | |
| Chairs | | | | | | |
| Subtotal | | | | | | |
| Mainframe computer costs | 2000 | 23000 | 23000 | 23000 | 23000 | 94000 |
| Installation costs | 2000 | - | - | - | - | 2000 |
| Printing and postage | 6000 | 4000 | 4000 | 4000 | 4000 | 22000 |
| Translation Costs | - | - | - | - | 5000 | 5000 |
| Interpretors | - | 1500 | 6000 | 9500 | 9500 | 26500 |
| Language instruction | - | 3000 | 5000 | 6500 | 6500 | 21000 |
| Subtotal | 10000 | 31500 | 38000 | 43000 | 48000 | 170500 |
| Total | 10000 | 31500 | 38000 | 43000 | 48000 | 170500 |
| 3. Program Travel | - | - | - | - | 9020 | 9020 |
| 4. Agency overheads (31.22%) | 19301 | 55298 | 115895 | 152350 | 173209 | 516053 |
| 5. Contingency | 11000 | 20000 | 50000 | 112000 | 188000 | 381000 |
| TOTAL | 102131 | 283926 | 575115 | 795339 | 964009 | 2720670 |

# ANNEX I

## STATUTORY CHECKLIST

# 5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

## A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

   (a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than $1 million over that amount)?

   Presented on pages 170 and 176 of the FY 85 CP (Annex III, Latin America and the Caribbean, Vol. I) at $1,000,000 in life-of-project funding.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of $100,00, will there be

| | | |
|---|---|---|
| | (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance? | Yes |
| 3. | FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance? | N/A |
| 4. | FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.) | N/A |
| 5. | FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project? | N/A |

| | | |
|---|---|---|
| 6. | FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. | Will be executed as a regional project. |
| 7. | FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions. | Project will establish the capability to train up to 200 public and private sector professionals annually in skills that will help recipient countries to increase international trade and improve technical efficiency of industry, agriculture and commerce. |
| 8. | FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). | Project will encourage U.S. private sector training and participation. Project will help to improve conditions for U.S. investment overseas by (1) improving data upon which investment and marketing decisions are based and (2) exposing participants to U.S. products during training. |

| | | |
|---|---|---|
| 9. | FAA Sec. 612(b), 636(b); FY 1982 Appropriation Act Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. | Countries will provide salary continuance for participants sent for training. Countries will cover costs of space and administrative support when hosting training activities. |
| 10. | FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? | N/A |
| 11. | FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? | Yes |
| 12. | FY 1982 Appropriation Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? | N/A |
| 13. | FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16? Does | N/A |

| | |
|---|---|
| the project or program take into consideration the problem of the destruction of tropical forests? | |
| 14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)? | N/A |

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

| | |
|---|---|
| a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and | Project will indirectly benefit the poor of the region by training public and private sector personnel working in AID priority development areas. Trainees will be encouraged to cooperate on a regional level and such cooperation will be promoted through regional and subregional training activities emphasizing shared solutions to common problems. |

| | |
|---|---|
| otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries? | |
| b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used? | Yes |
| c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)? | Yes |
| d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activitiy with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? | Recipient countries will cover at least 25 percent of training costs by providing salary continuance and airfare for U.S.-based training and providing space, equipment and some staff for in-country training. |

| | |
|---|---|
| e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than $100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character. | N/A |
| f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth? | Yes |
| g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage | Project responds to expressions of interest from LAC countries for the kind of training that will be provided. Project directly contributes to institutional development and strengthening of government effectiveness. |

institutional development; and supports civil education and training in skills required for effective participation in governmental processes esential to self-government.

2. Development Assistance Project Criteria (Loans Only) — N/A

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

c. ISDCA of 1981, Sec. 724 (c) and (d). If for Nicaragua, does the loan agreement require that the funds be used to the maximum extent possible for the private sector? Does the project provide for monitoring under FAA Sec. 624(g)?

3. Economic Support Fund Project Criteria — N/A

a. FAA Sec. 531(a). Will this assistance promote economic or political

stability? To the extent possible, does it reflect the policy directions of FAA Section 102?

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?

c. FAA Sec. 534. Will ESF funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives?

d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

## 5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

| | | |
|---|---|---|
| 1. | FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? | Yes |
| 2. | FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him? | Yes |
| 3. | FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? | N/A |
| 4. | FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be | N/A |

financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

5. FAA Sec. 604(g). Will construction or engineering services be procured from firms of countries otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one or these areas? N/A

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent that such vessels are available at fair and reasonable rates? N/A

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other N/A

Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available? — N/A

9. FY 1982 Appropriation Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States? — Yes

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to be used? — N/A

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

| | | |
|---|---|---|
| 3. | FAA Sec. 620(k). If for construction of productive enterprise, will agggregate value of assistance to be furnished by the U.S. not exceed $100 million (except for productive enterprises in Egypt that were described in the CP)? | |
| C. | Other Restrictions | |
| 1. | FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? | N/A |
| 2. | FAA SEc. 301(d). If fund is established solely by U.S. contributions and administed by an internatioal organization, does Comptroller General have audit rights? | N/A |
| 3. | FAA Sec. 620(h). Do arrangements exist to insure that Dnited States foreign aid is not used in a manner which, contrary to the best interests of the Dnited States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? | Yes |
| 4. | Will arrangements preclude use of financing: | Yes |
| | a. FAA Sec. 104(f); FY 1982 Appropriation Act Sec. 525: (1) To pay for performance of abortions as a method of family | |

| | |
|---|---|
| planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion? | |
| b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? | Yes |
| c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? | Yes |
| d. FAA Sec. 662. For CIA activities? | Yes |
| e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? | Yes |
| f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or | Yes |

| | |
|---|---|
| adjusted service compensation for military personnel? | |
| g. FY 1982 Appropriation Act, Sec. 505. To pay U.N. assessments, arrearages or dues? | Yes |
| h. FY 1982 Appropriation Act, Sec. 506. To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)? | Yes |
| i. FY 1982 Appropriation Act, Sec. 510. To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? | Yes |
| j. FY 1982 Appropriation Act, Sec. 511. Will assistance be provided for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? | Yes |
| k. FY 1982 Appropriation Act, Sec. 515. To be used for publicity or propaganda purposes within U.S. not authorized by Congress? | Yes |

ANNEX J

611(e) CERTIFICATION

NOT APPLICABLE

# ANNEX K

# ENVIRONMENTAL EXAMINATION

AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

LAC/DR-IEE-85-41

# ENVIRONMENTAL THRESHOLD DECISION

| | | |
|---|---|---|
| Project Location | : | LAC Regional |
| Project Title and Number | : | Regional Statistics Training<br>598-0636 |
| Funding | : | $500,000 (G) |
| Life of Project | : | Four years |
| IEE Prepared by | : | David Evans<br>LAC/DR/EST |
| Recommended Threshold Decision | : | Categorical Exclusion |
| Bureau Threshold Decision | : | Concur with Recommendation |
| Comments | : | None |
| Copy to | : | Dwight Johnson, Director<br>LAC/DR |
| Copy to | : | Davis Evans, LAC/DR/EST |
| Copy to | : | Paul White, LAC/DR/EST |
| Copy to | : | IEE File |

James S. Hester Date JUN 25 1

James S. Hester
Chief Environmental Officer
Bureau for Latin America
and the Caribbean

# ENVIRONMENTAL DETERMINATION

PROJECT LOCATION: Washington, D.C.

PROJECT PURPOSE AND ACTIVITIES: Regional Statistics Training Program

FUNDING: FY 85: $500,000 Grant

PROJECT PURPOSE AND ACTIVITIES:

To establish a training center to 1) increase the number of trained personnel in LAC public and private sector organizations that produce and use statistical data; 2) improve the quality of available statistical training in the region by offering an applied program which incorporates the use of the latest computer technology; and 3) train data users and producers in definition of data needs and analysis and presentation of data. The project activities include the development of five workshops and five 7-month modular courses in Spanish to be offered at the BUCEN Training Headquarters in Washington, D.C.

STATEMENT FOR CATEGORICAL EXCLUSION:

It is the opinion of the LAC/DR Project Committee that the project does not require an Initial Environmental Examination, because its activities are within the class of actions described in Section 216.2, Paragraph C (2)(i) "Categorical Exclusion of 22 CFR Part 216.

"Section 216.2 C(2)(i)"

"Education, technical assistance or training programs except to the extent such programs include activities directly affecting the environment."

CONCURRENCE OF LAC/DR ENVIRONMENTAL OFFICERS:

I have reviewed the above statement and concur in the determination that the Project "Regional Statistics Training Center" does not require an Initial Environmental Examination.

James Hester
Chief Environmental Officer
Bureau for Latin America and
the Caribbean

ANNEX L

# PROCUREMENT AND CONTRACTING PLAN

# Annex L--Procurement and Contracting Plan

This annex presents the procurement and contracting plans for all major expenditures under the project. The elements covered are:

-- A Participating Agency Service Agreement (PASA) with the U.S. Bureau of the Census, for which the draft statement of work is provided below;

-- A subcontract under the PASA for translation services, which is described and authorized within the PASA statement of work;

-- Purchasing of microcomputer equipment for use in carrying out data processing training. This equipment is described below and will be purchased by the Bureau of the Census, using their own purchasing authority;

-- Purchasing of other materials and supplies directly related to the implementation of the project. These purchases are described below and will be procured directly by the Census Bureau, using its own procurement or contracting authority.

## 1. Participating Agency Services Agreement (PASA)

The entire project will be implemented by the International Statistical Programs Center of the U.S. Bureau of the Census. This organization has worked with statistical offices throughout the work since 1939 in providing training and technical assistance.

A statement of work for the proposed PASA is provided at the end of this annex. The statement of work includes (a) the technical work in developing the curriculum and working with statistical offices and other organizations in the region to initiate the program; and (b) subcontracting and procurement as described below.

## 2. Translation Subcontract

The project plan provides for the translation, from English to Spanish, of a substantial volume of technical material. This work will be performed by a private sector firm, classified by the Small Business Administration as 8(a), under contract to the Census Bureau. The Census Bureau will use its own contracting authority to competitively award the contract. The Census Bureau, at its discretion, may have the services performed at the contractor's site or at the Census Bureau's facilities, using existing translation equipment already in place at the Census Bureau. Copies of any subcontracts awarded out of PASA funds will be provided to SER/CM.

## 3. Microcomputer Equipment

The project plan provides for the purchase and rental of several kinds of data processing equipment for use in the data processing training programs. The estimated cost of these items to be purchased is $65,900. The specific items are:

Table L-1. -- Listing of Data Processing Equipment to be Purchased

| Description of Item | Quantity | Estimated Unit Cost | Total Cost |
|---|---|---|---|
| Microcomputer systems | 10 | $5,675 | $56,750 |
| Microcomputer software | (X) | (X) | 2,000 |
| Workstations and pedestals | 6 | 386 | 2,300 |
| Modems | 6 | 475 | 2,850 |
| Supplies | (X) | (X) | 2,000 |
| TOTAL | (X) | (X) | $65,900 |

These items will be purchased by the Census Bureau using their own authority. In addition, the project plan provides for approximately $23,000 per year in computer use and equipment rental costs for mainframe computers. These costs begin in the second project year. Since these costs are incurred in actual training courses, these rental costs will be borne by participant fees and not the PASA to implement this project.

4. Other Equipment and Supplies

The other equipment and supplies listed below will be purchased by the Census Bureau, using PASA funds, through their own procurement authority.

Table L-2. -- Listing of Other Training Equipment to be Purchased

| Description of item | Quantity | Estimated Unit Cost | Total Cost |
|---|---|---|---|
| Simultaneous Translation Equipment | 1 | $9,350 | $9,350 |
| Overhead projectors | 5 | 675 | 3,375 |
| Porcelain boards, project screens, and projectors | (X) | (X) | 1,900 |
| Transparency machine | 1 | 770 | 770 |
| Slide Projector | 1 | 385 | 385 |
| Folding tables | 65 | 88 | 5,720 |
| Chairs | 120 | 35 | 4,200 |
| TOTAL | (X) | (X) | $20,000 |

5. Statement of Work for the PASA

The statement of work for the proposed PASA follows

# Statement of Work
# for the Development of the
# Latin American Statistical Training Center
# (ESAYTEC)

## I. Background

### A. Overall Objectives

This PASA provides for the implementation of a 5-year, $1 million project. Funding of $347,000 is provided initially. The full funding of the PASA is contingent on the results of a mid-term evaluation to be completed by August 31, 1987.

The objective of the work described below is to develop a training center for applied data collection and statistical data processing for statistical, data processing, and management staff of organizations that are producers or users of statistical data in Latin America. The center, to be known by the Spanish language acronym ESAYTEC (Escuela de Estadistica Aplicada y Technicas de Computacion), will be located at the U.S. Bureau of the Census in Washington. The International Statistical Programs Center (ISPC) of the Bureau of the Census, which currently conducts similar English language training programs, will have overall responsibility for implementing ESAYTEC. ISPC will coordinate training activities with other public and private organizations that will contribute instruction, material, and financial support.

### B. Overall Implementation Approach

In additon to developing the curriculum material outlined in Section VII, the overall implementation approach address (1) recognizing the priorities and needs of the region in curriculum development; (2) coordinating activities with public or private organizations interested in supporting ESAYTEC; and (3) informing both client organizations and sponsoring organizations, particularly USAIDs, of course offerings with sufficient lead time for their budget and planning cycles. This overall approach will be conducted as follows:

1. Curriculum Priorities

The Bureau of the Census will continue its contacts with regional statistical offices to ensure that the ESAYTEC program meets the higher priority needs. The Census Bureau made initial contacts with host country government agencies and international agencies in eight Latin American countries to determine the need for training in each of the countries. A curriculum for the ESAYTEC program, outlined in section VII of this work statement, has been developed using this information. An initial implementation task will be the elaboration of this information into a specific syllabus for each course, including firm offering dates for the forthcoming 12 months, and transmittal of an ESAYTEC catalog to organizations in the region. With this specific information of the proposed offerings, the Census Bureau and regional statistical offices will continue to refine the ESAYTEC program to meet regional needs.

2. Other Supporting Organizations

In addition to the information on host government interests and priorities gathered in the field visits, additional information has been obtained from several public and private organizations (e.g. PAHO, NCHS) that have offered financial, material, or instructional support. An early implementation task in which ISPC will play a central role is to establish overall coordination among participating organizations.

3. Coordination with Regional Statistical Organizations and Donors

While the curriculum development is going on, a report on the initial courses to be offered by ESAYTEC will be mailed to LA government agencies that would contribute participants and to donor agencies interested in sponsoring participants. Two purposes would be simultaneously served. First, for courses to be offered during the forthcoming 12 months, the report would inform relevant agencies of offering dates, locations, deadlines, costs, and related information. Second, for courses to be offered beyond the forthcoming 12 months, the comments of relevant organizations would be solicited to provide refined guidance on regional priorities and interests.

Because of the varied needs of the regions and rapid shifts in priorities, a careful monitoring program will be implemented to ensure that the focus of the ESAYTEC program is kept up-to-date with the needs of the client community. This monitoring program will include three components; (a) the broad-based distribution of the abovementioned report and comments received will serve as a first step by confirming previously identified priorities (or identifying new priorities); (b) the field visits to be made in connection with the annual report to LAC/DR/EST will provide occasion for more direct, intensive contact with regional organizations (see Section V); and (c) involvement in meetings of the Inter-American Statistical Council and specific donor coordination meetings to discuss ESAYTEC matters will give occasion for discussion of common concerns and interests.

In this collaborative implementation approach, there will be a high degree of interaction among various organizations leading to the establishment of ESAYTEC as a regional center for information and technology transfer. This will involve appropriate roles for government agencies in the U.S., the U.S.

private sector organizations (including university training programs), and organizations in the LA countries.

C. Maximized Use of Existing Facilities and Resources

The ESAYTEC program essentially builds on existing capacity, resources, and experience in ISPC. Due to the limited AID funding for developing new capacities, coupled with the high demand anticipated for Spanish language training in statistical data collection, processing, and analysis, it is essential to make the most effective use of existing facilities and resources, particularly during the first year.

D. Coverage of this Statement of Work

The life of PASA funding will be $1 million, against which this PIO/T provides initial funding. This Statement of Work describes the entire life of PASA activities, except for equipment and materials purchases, which will be specified in a subsequent amendment.

E. Organization of this Statement of Work

Section II describes the overall implementation approach and specific tasks. Section III provides an implementation schedule. Section IV provides a summary of the level of effort and resources requirement for each task. Section V describes the reporting requirements during the life of the PASA. Section VI describes the evaluation requirements. Section VII gives an outline of the curriculum for each workshop and technical course.

## II. Scope of Work

The program consists of the development of Spanish language curriculum and training materials and 5 workshops (to be conducted in the U.S. or the region) and 5 technical courses ( to be conducted at ISPC Washington-based headquarters offices). The curriculum outline is provided in Section VI; the workshop and technical courses titles are:

Workshops:
- -Health Statistics Systems Design and Implementation
- -Microcomputer Applications in Statistical Offices
- -Coordination of Data-producers and Data-users
- -Planning and Organizing a Population Census
- -Statistical Data Use in Social and Economic Planning

Technical Courses:
- -Computer Data Systems for Censuses and Surveys
- -Economic Statistics and Survey for Development
- -Food and Agriculture Statistics
- -Population Statistics and Demographic Analysis
- -Statistical Survey and Sampling Methods

At the end of the fifth year, all 10 workshops and technical courses will be regularly offered.

A. Initial Development Phase

Based on the priorities and needs identification made in the Project Paper and supplemented with comment from participating organizations and regional statistical offices on the proposed curriculum, an overall implementation plan will be prepared.

In this task, ISPC will use the course outlines in Section VI, modified as appropriate, to develop a full description of the course that will allow both participating organizations and regional statistical organizations to relate the proposed offerings to their specific needs and capabilities. ISPC staff members may make limited TDY visits to discuss comments, implementation schedules, project nomination procedures and deadlines, and coordinate with sponsoring organizations.

In addition, in response to several expressions of interest from potential participating organizations (e.g., PAHO, NCHS), ISPC will establish an overall scope of responsibility and division of work for implementation of the courses. It is anticipated that participating organizations will contribute material, financial and instructional support from their own resources. In this task, ISPC will work with these organizations to delineate the roles and responsibilities of each participating organization.

B. Course Development and Implementation

Five workshops and five technical courses will be developed over a five-year period. The workshops will be carried out primarily in different parts of the region and the technical courses will be conducted in Washington. For each, the following steps will be followed:

1. Develop, Translate, and Conduct In-House Testing of Materials

The complete range of materials will be developed for the course, including text material, instructional materials such as lecture outlines, transparencies, examinations, and assignments. To the extent possible, these materials will be designed to minimize the amount of time required by instructors in the conduct of workshops or classes. The materials will be translated into Spanish and checked for consistency and appropriate usage of technical terminology. The course materials will then be tested by in-house demonstration sessions to provide peer review of the scope, content, and technical clarity of the materials. The materials will be reproduced in sufficient numbers for the initial course or workshop offerings.

2. Announcement of Initial Course or Worksnop Offering

The course dates and nomination deadlines will be sent to USAIDs, other sponsoring organizations, and regional producers and users of statistics. These announcements will be sent with sufficient lead-time for host-country nomination processes and sponsoring agency processing. Depending on the actual timing of events, this announcement may be combined with the general announcement mentioned above.

3. Presentation of the Initial Offering

The course will be conducted, following which feedback from both the participants and their parent agencies will be obtained.

4. Incorporation of Comments and Production of Final Materials

Comments and suggestions from participants and their parent agencies will be incorporated and final materials will be reproduced in sufficient numbers for the first several years of course offerings.

During the first five years, all courses and workshops will be developed and conducted at least once. By the end of the fifth year, a regular schedule of course dates will be established.

## III. Overall Schedule

| Workshop or Technical Course | Development | | First Course | | Final Materials | |
|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End |
| A. Initial Development | | | | | | |
| 1. Preparation of Course Descriptions and Distribution | (NA) | (NA) | (NA) | (NA) | 8/85 | 12/85 |
| 2. Establish Overall Scope and Division of Labor among Participating Organizations | (NA) | (NA) | (NA) | (NA) | 8/85 | 12/85 |
| B. Implementation of Worksnops | | | | | | |
| 1. Health Statistics Systems | 11/85 | 5/86 | 6/86 | 6/86 | 7/86 | 10/86 |
| 2. Microcomputer Applications for Stat. Offices | 2/86 | 7/86 | 8/86 | 8/86 | 9/86 | 12/86 |
| 3. Coordination of Data-producers and Data-users | 10/86 | 3/87 | 4/87 | 4/87 | 5/87 | 8/87 |
| 4. Planning a Population Census | 10/88 | 3/89 | 4/89 | 4/89 | 5/89 | 8/89 |
| 5. Use of Statistical Data in Planning | 10/89 | 3/90 | 4/90 | 4/90 | 5/90 | 8/90 |

--continued--

## III. Overall Schedule

| Workshop or Technical Course | Development | | First Course | | Final Materials | |
|---|---|---|---|---|---|---|
| | Begin | End | Begin | End | Begin | End |
| C. Technical Courses | | | | | | |
| 1. Computer Data Systems for Censuses and Surveys | 11/85 | 8/86 | 9/86 | 4/87 | 5/87 | 8/87 |
| 2. Economic Statistics and Surveys for Development | 10/86 | 8/87 | 9/87 | 4/88 | 5/88 | 8/88 |
| 3. Food and Agriculture Statistics | 1/87 | 8/87 | 9/87 | 4/88 | 5/88 | 5/88 |
| 4. Population Statistics and Demographic Analysis | 10/87 | 8/88 | 9/88 | 4/89 | 5/89 | 8/89 |
| 5. Statistical Survey and Sampling Methods | 10/88 | 8/89 | 9/89 | 4/90 | 5/90 | 8/90 |
| D. Annual Review Meeting and Evaluation | | | | | | |
| 1. FY 86 Annual Review | (NA) | (NA) | (NA) | (NA) | 10/86 | 11/86 |
| 2. FY 87 Mid-term Evaluation Review | (NA) | (NA) | (NA) | (NA) | 9/87 | 9/87 |
| 3. FY 88 Annual Review | (NA) | (NA) | (NA) | (NA) | 10/88 | 11/88 |
| 4. FY 89 Annual Review | (NA) | (NA) | (NA) | (NA) | 10/89 | 11/89 |
| 5. Final Evaluation | (NA) | (NA) | (NA) | (NA) | 10/90 | 11/90 |

The budget for the entire scope of work is $1 million, of which $347,000 is provided in this PIO/T. The overall budget is contained in the project paper for project 598-0636, "LA Statistics Training Center." The specific budget for the initial $347,000, detailed by specific cost categories, is shown in attachment B. Similar specificity for the remaining $653,000 will be contained in future amendments.

## IV. Resource Requirements for Course Development Work

| Task or Activity | Resource Requirements by Category | | | |
|---|---|---|---|---|
| | Person-months | TDYs | Perdiem Days | Other* |
| **A. Initial Development** | | | | |
| 1. Preparation of Course Descriptions and Distribution. . . . | 1.0 | - | - | - |
| 2. Report on Findings. . . | 2.5 | 2 | 30 | - |
| 3. Establish Overall Scope and Division of Labor among Participating Organizations . . . . . | 2.0 | - | - | - |
| SUBTOTAL. . . . . | 5.5 | 2 | 30 | - |
| **B. Implementation of Workshops** | | | | |
| 1. Health Statistics Systems | 2.0 | 2** | 30** | $5,000 |
| 2. Microcomputer Applications for Stat. Offices . . . | 2.0 | 2** | 30** | 5,000 |
| 3. Planning a Population Census. . . . . | 2.0 | - | - | 5,000 |
| 4. Coordination of Data-producers and Data-users. . . . . | 2.0 | - | - | 5,000 |
| 5. Use of Statistical Data in Planning . . . . . | 2.0 | - | - | 5,000 |
| SUBTOTAL. . . . . | 10.0 | 4** | 60** | $25,000 |

-- continued --

See footnotes at the end of the Table

IV. Resource Requirements -- continued

| Task or Activity | Resource Requirements by Category | | | |
|---|---|---|---|---|
| | Person-months | TDYs | Perdiem Days | Other* |
| C. Technical Courses -- continued | | | | |
| 1. Economic Statistics and Surveys for Development | 9.0 | - | - | $17,800 |
| 2. Computer Data Systems for Censuses and Surveys . | 9.0 | - | - | 17,800 |
| 3. Food and Agriculture Statistics. . . . . | 9.0 | - | - | 17,800 |
| 4. Population Statistics and Demog. Analysis . . . . | 9.0 | - | - | 17,800 |
| 5. Statistical Survey and Sampling Methods. . . . | 9.0 | - | - | 17,800 |
| SUBTOTAL. . . . . | 45.0 | - | - | $89,000 |
| D. Preparation of Annual Reports | | | | |
| 1. FY 86 Report. . . . . | 1.0 | 1 | 23 | - |
| 2. FY 87 Report. . . . . | 1.0 | 1 | 23 | - |
| 3. FY 88 Report. . . . . | 1.0 | 1 | 23 | - |
| SUBTOTAL. . . . . | 3.0 | 3 | 69 | - |
| GRAND TOTAL . . . . . | 63.5 | 9 | 159 | $114,000 |

* Translation costs, English to Spanish

** During the first year, some of the instructional costs of workshops will be borne by the PASA. In the second and subsequent year, all instructional costs will be borne by course fees.

## V. Reporting Requirements

ISPC will submit monthly activity reports on project activities to LAC/DR/EST. These reports will provide brief statements of the activities during the preceding months and will notify AID of any issues requiring AID attention or minor adjustments in the workplan. ISPC will also submit quarterly reports that provide more analytical reporting on the overall progress of the implementation in meeting the overall project goals. These will include four sections: (a) activities during the preceeding quarter; (b) projected work during the next quarter; (c) discussion of issues that need to be resolved; and (d) summary of expenditures and funding balances. The quarterly reporting will be supplemented by an annual review meeting between AID and Census to review progress toward the overall project objectives. Trip reports will also be submitted for each TDY visit to the region.

Monthly reports will be due within 15 days of the end of the month; quarterly reports within 30 days of the end of the quarter; and trip reports within 30 days of the end of the TDY.

## VI. Evaluation Arrangements

The overall project has a Condition Precedent that funds, obligated after Sept. 30, 1987, are subject to the findings of the evaluation to be conducted prior to that date. Within 90 days of the signing of the PASA, the Bureau of the Census will submit a plan for carrying out the mid-term evaluation. The plan will present (a) issues to be addressed; (b) specific data of other information that will be gathered or collected; (c) an analytical plan for using the information to analyze the issues; and (d) a report outline. The plan will be submitted for AID approval. The Bureau of the Census will have the responsibility for implementing the evaluation plan. The mid-term evaluation report will be submitted to AID by August 31, 1987.

## VII. Curriculum

In this section the details of the curriculum to be developed are specified. It is anticipated that minor adjustments to the curriculum outlined below will be made as the materials are developed by the ISPC staff. Major adjustments to the curriculum for any of the identified technical courses or workshops, or changes in the field of study to be covered in a workshop or technical course, must be discussed and approved by AID and documented by letter or memorandum between ISPC and LAC/DR/EST.

The outlines of the curriculum for the workshops and courses are divided into (A) workshops and (B) technical courses.

### A. Workshops

#### 1. Health Statistics Systems Design and Implementation

Duration: 2 weeks

Target Audience: Managers and senior technicians responsible for producing health statistics and users of health statistics.

Description: This workshop presents the principles of information systems development and relates them to health statistics in developing countries. Topics receiving special emphasis include developing a dialogue among data users, data collectors, and data processing staff: defining informational requirements; integrating health statistics into the national statistical system; and computer and microcomputer applications for processing, presenting, and disseminating health information.

2. Microcomputer Applications in Statistical Offices

Duration: 2-3 weeks

Target Audience: Professionals involved in data processing, management, or analysis in statistical offices.

Description: This workshop will concentrate on the specialized uses of microcomputers in statistical offices that will improve the quality and timeliness of statistical publications. Participants will acquire an understanding of microcomputer hardware and software concepts, how to select hardware, how to determine when the use of microcomputers is appropriate, and how to plan for their introduction -- all with a special focus on the unique features of statistical organizations. The workshop also will include practice using several software packages on representative microcomputers.

3. Planning and Organizing a Population Census

Duration: 2-3 weeks

Target Audience: Executives and managers in statistical offices who will have responsibilities in making census management decisions.

Description: The concepts and principles of planning a census will be presented through a series of lectures and practical exercises that will give the participants confidence in planning the activities of a census. The participants will produce a general plan for all operations and a specific plan with details for an individual operation.

4. Coordination of Data Producers and Data Users

Duration: 1 week

Target Audience: Pairs of Users and producers of statistical data.

Description: Participants will learn the types of information and forms of communication needed for a useful research project. Producers will earn how to elicit information regarding the objectives of data analysis from the users and data users will learn how to recognize constraints in data collection capabilities and how to prioritize complex needs. One especially effective format for this workshop would involve both producers and users of statistical data working toward a common goal in a single country or region.

5. Use of Statistical Data in Social and Economic Planning

Duration: 2-3 weeks

Target Audience: Executives and managers responsible for using or producing statistical data for planning and policy analysis.

Description: This workshop will provide an overview of informational requirements in development planning and for project monitoring and evaluation. The following topics are treated in detail: (a) defining data needs and communicating them to statisticians; (b) effective presentation and dissemination of data to users; and (c) use of social and economic statistics in policy analysis. Emphasis is placed on exchange of information between data producers and data users who participate in the workshop.

B. Technical Courses

In the following sections, the technical courses are described. To meet the dual goals of short course offerings and the required technical depth of coverage, the courses are offered in "modules." The module concept permits the subject matter to be organized into discrete segments that can be taken either (a) in sequence for complete subject matter coverage or (b) in meaningful segments of 2 or 3 months in duration. Thus, persons with some practical experience may skip the first module and begin in the latter modules. Similarly, persons with less experience could take the full sequence over a longer period of time with intermittent work assignments in their home office. While most participants will enroll for the full program, the flexibility exists to respond to a varied demand with specialized needs.

1. Economic Statistics and Surveys for Development

Module 1 (3 months) -- Basic Training for Economic Statisticians

| | | Classroom Hours |
|---|---|---|
| Part A (1 month) | Microeconomic Concepts for Statisticians | 20 |
| | Elements of Economic Surveys/Censuses | 20 |
| | Introduction to Statistical Methods | 20 |
| | Geography and Mapping for Surveys and Censuses | 20 |
| Part B (2 months) | Macroeconomic Concepts for Statisticians | 20 |
| | Selected Topics in Economic Surveys/Censuses | 10 |
| | Small-Scale and Household Industries | 10 |
| | Measures of Economic Activity | 20 |
| | Questionnaire and Table Design | 30 |
| | Introduction to Computer Data Processing | 15 |
| | Introduction to Survey Sampling | 30 |
| | Intermediate Statistical Methods | 25 |
| | Total Classroom Hours in Module 1 | 240 |

Module 2 (2 months) -- Intermediate Training for Economic Statisticians

| | Classroom Hours |
|---|---|
| Foreign Trade Statistics | 20 |
| Selected Topics in Economic Statistics | 10 |
| Use of Microcomputers in Survey and Census Operations | 20 |
| Regression and Correlation Analysis | 20 |
| Quality Control of Census and Survey Operations | 20 |
| Editing, Coding, and Imputation Techniques | 25 |
| Preparation of Documentation and Processing Specifications | 20 |
| Independent Project | 25 |
| Total Classroom Hours in Module 2 | 160 |

Module 3 (2 months) -- Administration of Economic Statistics Programs

| | Classroom Hours |
|---|---|
| Role of Economic Statistics in National Development | 20 |
| Presentation and Publication of Data | 15 |
| Data Dissemination and Publication of Data | 15 |
| Fundamentals of Management | 20 |
| Hiring and Training of Field Staff and Office Staff | 20 |
| Budgeting, Scheduling, and Controlling Operations | 20 |
| Survey Evaluation Techniques | 25 |
| Independent Project | 25 |
| Total Classroom Hours in Module 3 | 160 |
| Total Classroom Hours, all Modules | 560 |

2. Computer Data Systems for Censuses and Surveys

Module 1 (3 months) -- Introduction to Census and Survey Data Processing

| | | Classroom Hours |
|---|---|---|
| Part A (1 month) | Computer Data Processing Fundamentals | 30 |
| | Fundamentals of Structured Programming | 30 |
| | Introduction to Census and Survey Methodology | 20 |
| | Introduction to Statistical Methods | 20 |
| Part B (2 months) | Introduction to Structured COBOL | 60 |
| | Microcomputer Applications for Statistical Processing | 30 |
| | Generalized Editing and Imputation Concepts (CONCOR) | 50 |
| | Analysis and Design of Information Systems | 40 |
| | Introduction of Survey Sampling | 20 |
| | Total Classroom Hours in Module 1 | 300 |

Module 2 (2 months) — Intermediate Training in Census and Survey Data Processing

| | |
|---|---|
| Intermediate/Advanced Structured COBOL | 70 |
| Census Tabulation System (CENTS 4) | 50 |
| Implementation and Control of Information Systems | 50 |
| Preparation of Documentation and Processing Specifications | 20 |
| Total Classroom Hours in Module 2 | 190 |

Module 3 (2 months) — Data Processing Administration and Management

| | |
|---|---|
| Fundamentals of Management | 20 |
| Project Management Techniques | 20 |
| Recruitment and Development of Data Processing Staff | 20 |
| Operation of a Computer Center | 40 |
| Selection, Procurement, and Evaluation of Computer Hardware and Software | 25 |
| Database Management Systems | 40 |
| Independent Project | 25 |
| Total Classroom Hours in Module 3 | 190 |
| Total Classroom Hours, All Modules | 680 |

3. Food and Agriculture Statistics

Module 1 (3 months) -- Basic Training for Agricultural Statisticians

| | | Classroom Hours |
|---|---|---|
| Part A (1 month) | Introduction to Statistical Methods | 30 |
| | Concepts and Tools for Agricultural Statisticians | 15 |
| | Agricultural Survey Organization and Methods | 30 |
| | Fundamentals of Computer Data Processing | 15 |
| Part B (2 months) | Survey Planning Techniques | 15 |
| | Geography and Mapping for Agricultural Surveys | 25 |
| | Control and Evaluation of Nonsampling Error | 20 |
| | Sampling Concepts and Applications | 30 |
| | Questionnaire and Table Design | 30 |
| | Frame Construction for Agricultural Samples | 40 |
| | Total Classroom Hours in Module 1 | 250 |

Module 2 (2 months) -- Intermediate Training for Agricultural Statisticians

| | |
|---|---|
| Preparation of Documentation and Data Processing Specifications | 20 |
| Editing, Coding, and Imputation Techniques | 25 |
| Use of Microcomputers in Survey and Census Operations | 35 |
| Objective Measurement of Area and Yield | 30 |
| Quality Control of Census and Survey Operations | 20 |
| Estimating Techniques for Agricultural Statistics | 15 |
| Review and Publication of Agricultural Data | 20 |
| Total Classroom Hours in Module 2 | 165 |

Module 3 (2 months) -- Administration of Agricultural Survey Programs

| | |
|---|---|
| Agricultural Survey Organization | 20 |
| Fundamentals of Management | 30 |
| Hiring and Training of Field Staff and Office Staff | 25 |
| Preparation, Distribution, and Receipt of Materials | 30 |
| Agricultural Survey Office Operations | 25 |
| Agricultural Survey Evaluation Techniques | 30 |
| Total Classroom Hours in Module 3 | 160 |
| Total Classroom Hours, all Modules | 575 |

4. Population Statistics and Demographic Analysis

Module 1 (3 months) -- Basic Training in Demography

| | | Classroom Hours |
|---|---|---|
| Part A (1 month) | Population Dynamics and Demographic Analysis | 20 |
| | Introduction to Design of Surveys and Censuses | 30 |
| | Introduction to Statistical Methods | 30 |
| Part B (2 months) | Techniques of Demographic Analysis: Mortality and Fertility | 30 |
| | Demographic Analysis Laboratory | 25 |
| | Questionnaire and Table Design | 30 |
| | Introduction to Survey Sampling | 30 |
| | Civil Registration and Vital Statistics | 30 |
| | Introduction to Microcomputer for Demographic Analysis | 25 |
| | Total Classroom Hours in Module 1 | 250 |

Module 2 (2 months) — Intermediate Training in Demography

| | |
|---|---|
| Demographic Measures from Incomplete Data | 40 |
| Advanced Demographic Analysis Laboratory | 20 |
| Collection and Analysis of Migration Data | 20 |
| Seminar: Selected Topic in Demographic Statistics | 10 |
| Editing, Coding, and Imputation Techniques | 25 |
| Preparation of Documentation and Processing Specifications | 20 |
| Applied Regression and Correlation Analysis | 30 |
| Total Classroom Hours in Module 2 | 165 |

Module 3 (2 months) -- Administration of Demographic Analysis Programs

| | |
|---|---|
| Control and Evaluation of Nonsampling Errors | 30 |
| Strategies for Demographic Data Collection | 20 |
| Selected Topics in Demographic Analysis | 20 |
| Population Projections: Concepts and Applications | 30 |
| Seminar: Selected Topics in Demographic Statistics - Cont'd | 20 |
| Introduction to the Analysis of Data | 20 |
| Advanced Microcomputer Programming, Applications, and Software | 20 |
| Total Classroom Hours in Module 3 | 160 |
| Total Classroom Hours, all Modules | 575 |

5. Statistical Survey and Sampling Methods

Module 1 (3 months) -- Basic Training for a Sampling Statistician

| | | Classroom Hours |
|---|---|---|
| Part A (1 month) | Design of Sample Surveys | 20 |
| | Introduction to Design of Surveys and Censuses | 30 |
| | Introduction to Statistical Methods | 30 |
| Part B (2 months) | Design of Sample Surveys — continued | 30 |
| | Survey Sampling Laboratory | 20 |
| | Questionnaire and Table Design | 30 |
| | Introduction to Computer Data Processing | 15 |
| | Frame Construction for Agricultural Samples | 25 |
| | Independent Project | 40 |
| | Total Classroom Hours in Module 1 | 240 |

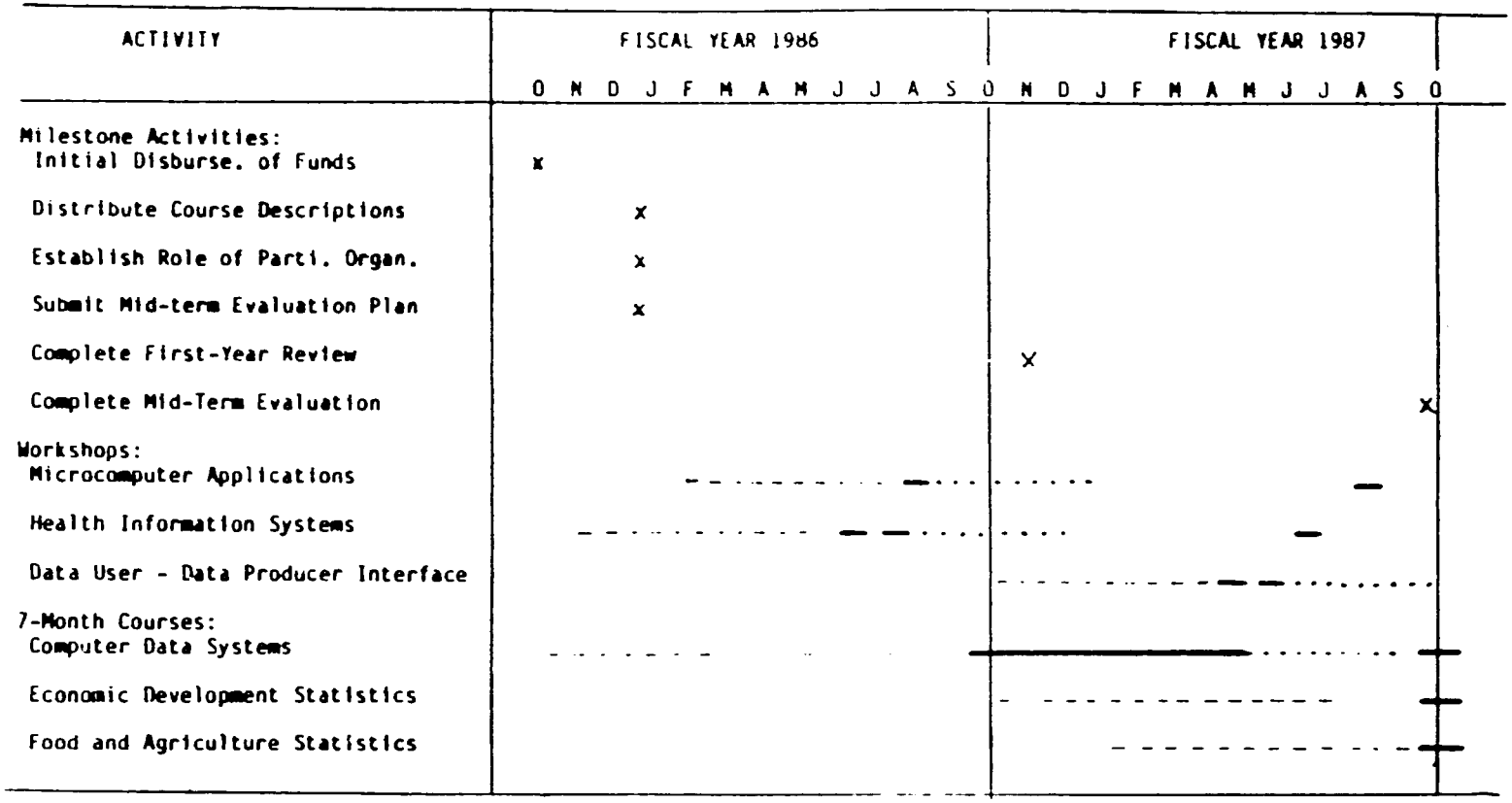
Module 2 (2 months) — Intermediate Training for Sampling Statisticians

| | |
|---|---|
| Preparation of Documentation and Processing Specifications | 20 |
| Applied Regression and Correlation Analysis | 30 |
| Variance Estimation in Sample Surveys | 30 |
| Laboratory in Variance Estimation Techniques | 20 |
| Seminar: Selected Topics in Sampling and Stat. Methods | 20 |
| Editing, Coding, and Imputation Techniques | 25 |
| Independent Project | 20 |
| Total Classroom Hours in Module 2 | 165 |

Module 3 (2 months) -- Administration of Sampling Statistics Programs

| | |
|---|---|
| Control and Evaluation of Nonsampling Error | 30 |
| Current Survey Design and Evaluation Techniques | 20 |
| Introduction to the Analysis of Data | 20 |
| Seminar: Selected Topics in Sampling and Statistical Methods — continued | 20 |
| Management of Statistical Activities | 20 |
| Presentation, Publication, and Dissemination of Data | 20 |
| Training for Statistical Activities | 30 |
| Objective Measurement of Area and Yield | 30 |
| Total Classroom Hours in Module 3 | 190 |
| Total Classroom Hours, all Modules | 560 |

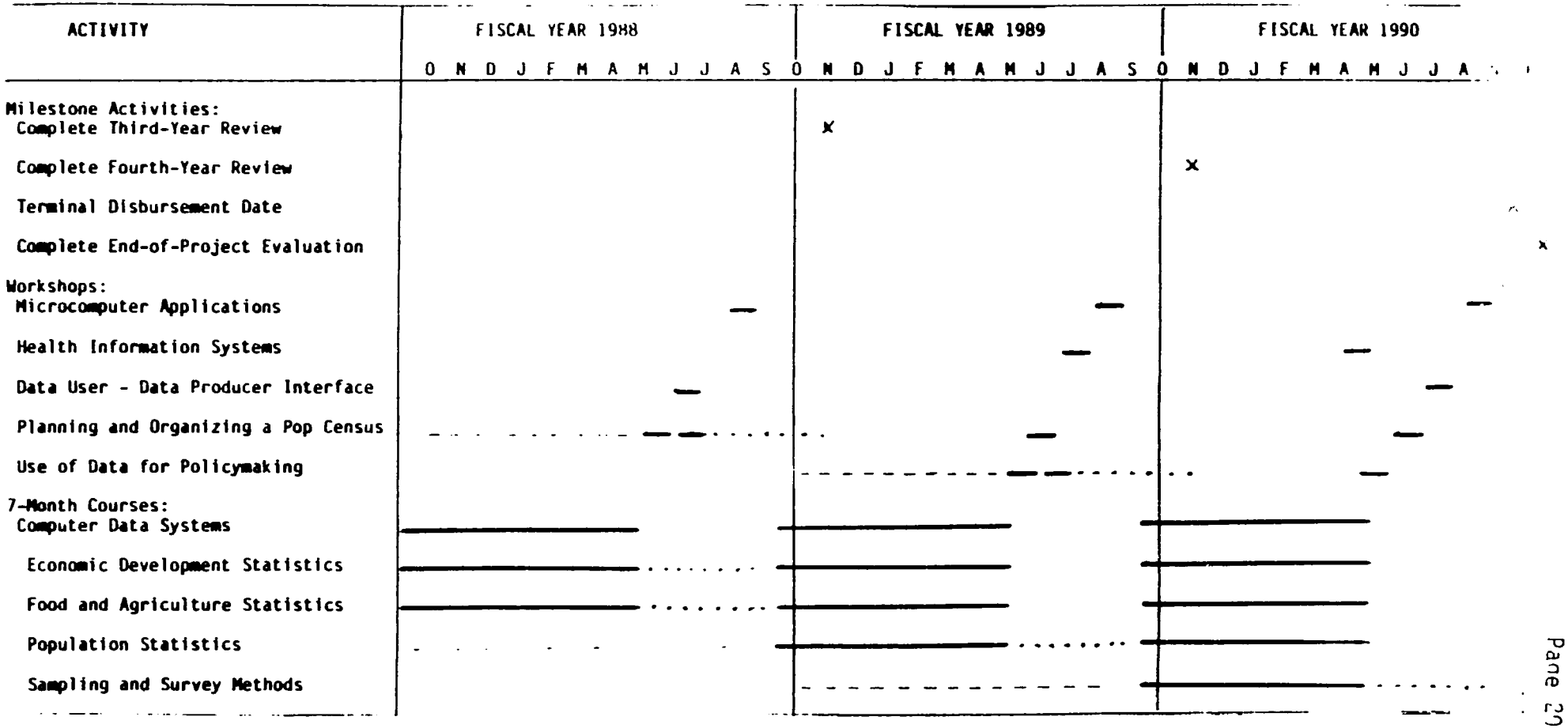
SCHEDULE FOR PROJECT IMPLEMENTATION DURING YEARS 1 AND 2




Key to Symbols:

| | |
|---|---|
| Completion of Milestone Activity | x |
| Development of Training Activity | - - - - - |
| Implementation of Training Activity | ——— |
| Evaluate and Finalize Training Activity | . . . . . |

SCHEDULE FOR PROJECT IMPLEMENTATION DURING YEARS 3 TO 5




Key to Symbols:

| | |
|---|---|
| Completion of Milestone Activity | x |
| Development of Training Activity | - - - - - |
| Implementation of Training Activity | ——— |
| Evaluate and Finalize Training Activity | . . . . . |