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PAPER - US CENSUS BUREAU

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INTERNATIONAL TRAINING PROGRAMS IN THE U.S. CENSUS BUREAU

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Program Framework

The U.S. Census Bureau began its program of international technical assistance in the 1930's and its formal training program began in 1947. Over the years, the Bureau, through its international programs, was instrumental in establishing the official statistical offices of a number of countries.

In response to requests from developing countries around the world, International Programs Center (IPC) provides technical assistance, training and training materials, methodological development and materials, and statistical software in all aspects of censuses, surveys, and information systems: including sample design, data collection, data processing, analysis, and dissemination.

The IPC also exchanges statistical publications and information with nearly every national statistical agency and develops population estimates and projections for every country in the world.

Specifically, the IPC:

- ! Offers short- and long-term technical assistance to developing countries. The Bureau has assisted developing countries in such areas as:
 - S Population and Housing Censuses
 - S Economic and Agriculture Censuses and Surveys
 - S Demographic Surveys;
 - S Vital Registration;
 - S Health Information Systems;
 - S Household Income and Expenditure Surveys;
 - S Labor Force Surveys;

- ! Provides practical, applied training in statistics and related topics to participants from developing country statistical offices around the world. Since the inception of the program, over 12,000 participants from over 120 countries have been trained, both at the Bureau's training facility in Washington and overseas. The graduates of this program represent virtually every developing and emerging country in the World.

- ! Distributes statistical software designed and developed by IPC to meet the needs of

statistical agencies. Currently, over 120 countries are using the Census and Survey Processing (CSPRO) and its predecessor Integrated Microcomputer Processing System (IMPS) in all phases of the processing of their censuses, as well as a variety of surveys and other statistical efforts. Similarly, the Bureau's Population Analysis Spreadsheets were distributed to over 50 countries to support demographic analysis.

- ! Develops and distributes training and methodological materials to developing countries. This includes the development of hypothetical country case studies focused on major statistical programs and a variety of technical manuals.
- ! Evaluates, analyzes, produces estimates and projections, and makes available demographic data for all countries of the world. In addition, BUCEN collects, analyzes and provides sub-national data as appropriate. The demographic data is made available via a mix of routine publications, special reports, computer databases, and consultations. To ensure timely access to key demographic variables and selected socio-demographic data, BUCEN maintains an International Data Base (IDB) on the Bureau's Internet site.
- ! Compiles and assesses data on HIV/AIDS prevalence in countries in Asia, Africa, and Latin America. These data are maintained in a data base that is distributed after the regional and international AIDS Conferences (twice a year) to U.S. and other Government agencies, NGOs, and private and international organizations. BUCEN evaluates and prepares reports that present trends and reviews the prevalence situation of countries and regions. BUCEN estimates the impact of HIV/AIDS on mortality in countries around the world. These estimates are used to incorporate mortality due to HIV/AIDS in BUCEN's population estimates and projections.
- ! Hosts 450-500 foreign visitors annually, many of whom are from the developing world. This program is vital in communicating new statistical priorities and technologies to senior country officials, who lack the time for participation in formal training. This program has been instrumental in fostering greater commitment to data dissemination and use.
- ! Exchanges statistical publications with 130 countries and several international organizations.

BUCEN's international programs operate almost exclusively on a cost-reimbursable basis. The U.S. Agency for International Development is the chief source of funding, and the United Nations, the World Bank, and individual governments also provide support.

Brief History of the IPC Training Program

IPC's training program was initially established as part of the program of assistance to Western Hemisphere countries. In 1949 the program was expanded to all developing countries of the world. From the mid-1950s to the early-1990s, IPC offered a basic training program in Washington that lasted one year, with six areas of specialization. These included sampling and survey methods, agriculture surveys and censuses, population statistics and demographic analysis, economic censuses and surveys, computer data systems, and statistical technology and survey management. Although participants specialized in one area, they were introduced to related fields and skills to give them a feel for how their specialty fits into the total statistical system.

Upon completion of the one-year program, participants were awarded a diploma by the Census Bureau. IPC also offered a combined degree program in cooperation with George Washington University and Georgetown University, which enabled its students to earn masters degrees after successful completion of an additional 6 to 12 months of study.

An important component of the IPC training program was a demonstration survey. The survey was carried out at the end of each year. The participants planned, prepared, and conducted the survey under the supervision of IPC training staff. Technical and organizational skills learned in the classroom were applied in a team effort that solidified the principles and practices taught in the classroom and enhanced cross-specialty understanding and cooperation.

Although the primary objective of the program was to train statisticians and technicians in the practical skills needed to plan and carry out surveys, censuses, and numerous other statistical activities; the program also included a small training-of-trainers component in an effort to encourage participants to assist others in developing similar skills upon their return to their respective countries.

In addition to the diploma program described above, IPC offered a range of country and regional workshops during this period. Beginning in the 1980's, IPC added a summer workshop program to its training activities.

In the early 1990's the numbers of participants in the training program began to fall, and after some alternative training schedules were tried, the Bureau actually announced the end of the training program in the spring of 1995. The decision was quickly rescinded. Not only were we convinced that IPC could mount a viable training program, but we strongly believed that a training program would be to IPC's long-term benefit, even if it was not entirely self-funding. Our experience over the years indicates that the training program is one of the most powerful and effective tools for fostering and preserving close relationships with our counterpart organizations. Further, the training program is an indispensable component of our overall technical assistance activities. Nevertheless, it was clear the structure and content of the training program had to change.

Before instituting the revised training program, IPC reviewed past training program evaluations and initiated discussions with statistical institutions and donors, as a basis for redesigning the training program. The key findings are outlined below.

- ! Cost and the lack of funds were the most frequently cited barriers to greater participation in IPC training. When asked what single thing we could do to improve our training, reducing the cost was most frequently mentioned. The issue here seemed to be total training cost and not the unit cost of the training.
- ! There was a strong preference on the part of donors for training of shorter duration. Counterpart organizations were evenly divided on this issue.
- ! There was expressed interest, particularly among donors, in encouraging collaboration with local and regional training institutions. This contrasted sharply with past experience and with the increasing country focus on the part of donors.
- ! Donors emphasized training that was specifically project related and were less interested in the broad development of the statistical system.
- ! Donors emphasized their information needs -- calling for increased focus on data analysis and dissemination.
- ! We also came to the conclusion that we were competing against ourselves. To some extent, this was both expected and desirable. We very much wanted to shift our training effort to more cost-effective regional and country workshops. Nevertheless, this competition had a very real negative effect on the viability of our diploma program.
- ! Finally, we concluded that the primary constraint on participation in our training programs was the willingness of donors to fund that participation. Expressed another way, there was substantial demand for our training that exceeded the availability of donor funding. In some cases, the countries themselves funded training, but in many other instances, the resource limitations of the countries themselves and assisting organizations in those countries prevented participation.

In response to what we learned, IPC completely restructured its training program. The new approach to training at IPC consists of three elements: a shorter and more flexible training format, new courses on topics not previously offered, and more specialized skills training.

Strategic Transitions

The following changes were made in our training strategies in response to our findings.

- ! IPC revived its summer workshop program. The courses were offered serially to

minimize the classroom, support, housing, and computer requirements of the program. The individual courses were limited in duration from three to six weeks, and an effort was made to provide as much lead-time as possible.

- ! IPC increased its emphasis on Washington-based ad hoc training courses for specific countries, or when possible, multiple countries. This strategy has been particularly successful in sampling training for the former Soviet Union countries.
- ! IPC continued its successful program of in-country workshops. For those topics where more than 5 participants in a country needed specific training, this approach is most cost-effective. This strategy has been used extensively in training in IPC=s statistical software.
- ! IPC has used every opportunity to offer regional training. This training takes several forms.

S Broadening of country-specific training - Whenever IPC offers an in-country workshop with fewer than 15 participants, we are able to increase the number of participants up to that number without increasing the cost of the workshop. This is based on the assumption that we can train up to 15 participants effectively, although this varies by content area. In such instances, we encourage the participation of trainees from nearby countries at a nominal cost to cover a portion of the expense of the training venue, administrative support, and equipment. This training is made available for little more than the cost of the participants= transport and subsistence.

S Cost-sharing - We encourage donor support for regional training efforts through cost-sharing. In a number of instances, our primary donor, USAID, will fund the cost of our staff time if we can find another donor willing to cover such costs as our travel and per diem, classroom, equipment, and participant travel and subsistence.

Regional workshop partnerships include: SIAP – IMPS/CSPPro in 1998, 2000, 2001 (2), and 2002; ECA - Improving Data Quality in 1998; UNSD for the South African Development Community - Census Planning, Management, and Organization 1999 2 workshops), Census Mapping in 1999 and 2000, Census Processing in 2000, and Census Analysis and Dissemination in 2002; UNFPA Country Support Team in Senegal –Census Analysis in 1999, IMPS in 1999, Post-Enumeration Surveys in 2001, and CSPPro in 2002; UNFPA CST Addis – CSPPro in 2002; and UNSD for the western Commonwealth of Independent States – Census Management in 2001 and CSPPro in 2001.

S Donor advisor training - We also offer advisory staff from other donors and

international organizations reduced-tuition or tuition free training, either in our formal training program or on an ad hoc basis. This is particularly true of training in our statistical processing software. Our view is that there is a lot of work to be done in supporting developing country statistical offices, and enhancing the capabilities of other technical assistance providers benefits everyone, and leads to greater uniformity in advice and software use.

- ! IPC has instituted a new training strategy that we call the work-study. In these instances, one or more professionals from one of our counterpart institutions travel(s) to Washington to work on a specific task or product. Examples of this are the development of a census plan, edit specifications and programming, tabulation specifications and programming, and census analysis and production of publications.
- ! IPC has also added a full description of its training program and the specific courses offered to its Web site. We have instituted online applications, lowering our administrative burden and improving communications.
- ! Finally, IPC has expanded its use of contractors to staff selected courses. Heavy staff workloads, competition from the 2000 population census, and the need for highly specialized skills motivated this decision. Not only did this enable us to offer courses that could not have been offered otherwise, but it enabled us to contract for specialized skills only when needed. This has lowered the cost of training and increased the range of courses we can offer.

Content transitions

The following changes were made in the content of our training program and its determination.

- ! One of the most important changes we have made is the involvement of statistical institutions in the determination of the courses we offer. Every year, approximately nine months before the beginning of the summer workshops, we send out a questionnaire proposing 15 to 20 course titles. We ask our counterparts to indicate which courses they might be willing to participate in and how many students they might send. Clearly, not all of these hypothetical participants show up, but the responses at least give us an indication of the courses of greatest interest to our counterpart institutions. A list of the training options offered for this year follows.

Proposed Workshops for Spring/Summer 2003

1. Building an Integrated Data Dissemination System (3 weeks)
2. Census and Survey Information Processing (CSPRO and IMPS) (4 weeks)
3. Sampling and Statistical Methods (4 weeks)
4. Geographic Information Systems (6 weeks)

5. Analysis and Evaluation of Gender Statistics (3 weeks)
6. Edit and Tabulation Specifications (2 weeks)
7. Improving Data Quality (4 weeks)
8. Statistical Methods for Measuring Economic Development and Growth (3 weeks)
9. Analysis & Application of Models for Reconciling Economic and Demographic Projections for a Region or a Country (3 weeks)
10. Constructing & Reconciling National Accounts Systems, Input-Output Frameworks and Consumer & Producer Price Indices (3 weeks)
11. Measuring International Migration (1 week)
12. Measuring Internal Migration for Subnational Population Projections (1 week)
13. Rural / Urban Projections (2weeks)

! One of the results of the above process has been an increased emphasis on data analysis and dissemination. As can be seen in the list of courses we offered this past summer (see below), four of the seven courses are focused on analysis and data access. In addition, Census and Survey Processing workshop has a strong end-user processing component. The course is based on IMPS and CSPro. IMPS and CSPro were initially developed as large-scale statistical processing tools, focusing on data entry, batch editing, and the creation of publication tables. They were designed as tools for data processing professionals. While we have continued to improve and expand these capabilities, increasingly our emphasis has been on the creation of simple tools for tabulation, thematic mapping, and table database access that can be used by statisticians, analysts, and other data users.

Courses offered in 2000 included:

- S Editing Specifications Development for Censuses and Survey (29 April - 10 May, 2002, 2 weeks)
- S Microcomputer Processing of Censuses and Surveys (13 May - 7 June, 2002, 4 weeks)
- S Effective Data Dissemination Systems for the New Millennium (10 - 28 June, 2002, 3 weeks)
- S Sampling and Statistical Methods (1 - 26 July, 2002, 4 weeks)
- S Geographic Information Systems (GIS) (29 July - 6 September, 2002, 6 weeks)
- S Analysis and Evaluation of Gender Statistics (9 - 27 September, 2002, 3 weeks)
- S Statistical Methods for Measuring Economic Development and Growth (30 September - 18 October, 2002, 3 weeks)

! While our training has always focused on practical skills, we have redesigned our courses to strengthen training in skills that will improve job performance. At least 50% of each course will involve laboratories and exercises.

Summary

For more than 50 years, we have provided technical assistance and training to meet the needs of statistical agencies around the world. In the last several years, we have redesigned our program to even more effectively meet these needs, both directly and through partnerships with other organizations. Our program has become leaner and more focused, while continuing to emphasize practical skills and experience.