SPECTRUM Training for Policy Success

Public Policy Based on Data

Data provide a basis for policy dialogue and contribute to the development of effective and responsive policies. Appropriate data inform stakeholders about the extent to which a given situation exists, as well as its associated costs and consequences. Without data, comparing the effectiveness of policy alternatives is not possible.

One way data are used in policy development is through models and projections. SPECTRUM is a suite of policy models used to project the need for family planning/reproductive health, maternal health, and HIV/AIDS services and the consequences of not addressing needs in these areas. SPECTRUM has been developed as a way to incorporate data into policy formulation and dialogue. Yet using data correctly to support policy requires that people be trained in relevant concepts, software, and interpretation of results.

POLICY and SPECTRUM

The POLICY Project is committed to building in-country capacity so that people can participate in the policy process. One way this goal is accomplished is by introducing SPECTRUM into pre-service and in-service training. Results from SPECTRUM can be used to draw attention to priority action areas, identify the effects of various funding and implementation strategies, and serve as an advocacy tool for NGOs and civil society groups. To build capacity in computer modeling with in-country partners, POLICY provides technical assistance in a number of areas including data collection, data analysis and use, advocacy, and presentation software.

SPECTRUM has been introduced into pre-service and in-service training in both the United States and abroad. UNAIDS and WHO use SPECTRUM in estimating HIV infections at national, regional, and global levels. Institutionalizing the use of SPECTRUM by training students and professionals is a strategy that has been used in a number of countries.

An Approach to Training

As a part of POLICY's capacity-building program, key individuals have been trained in the use of the SPECTRUM models. Using an interactive approach, staff from ministries of health, national population commissions, universities, and AIDS programs participate in training workshops. Training is designed to give participants experience in using the software and interpreting results. Including government officials in SPECTRUM training workshops has facilitated the introduction of computer modeling into public sector activities and has helped policymakers use data more effectively to respond to policy needs. Working with universities helps institutionalize the use of computer simulation as cadres of students in policy-related fields incorporate the modeling into their skill sets. Looking toward the future, investments in building the capacity of future policymakers will help ensure that data will continue to be used in policy development over the long term. The strategy of introducing SPECTRUM into both pre-service and in-service training builds both current and future capacity.

The following three experiences from Egypt, Uganda, and the Philippines illustrate different approaches to institutionalizing SPECTRUM by collaborating with universities, training centers, and governments.

Stakeholders in Egypt Learn to Use Spectrum

With collaboration from Partners in Population and Development and the Ford Foundation, POLICY/Egypt has conducted a series of ten-day workshops that included 71 participants from 16 countries in Africa and Asia. The workshops focused on five specific skill areas that facilitated participants' becoming more effective actors in the policy process. Participants learned about population policies and strategies and used different tools to analyze reproductive health issues in their home countries. Using the DemProj, FamPlan, and RAPID models of the Spectrum suite, they examined the effects of implementing policy options that affect a country's population. Advocacy skills and the development of effective advocacy messages were also part of the workshop. Participants were trained to become more effective trainers and develop documents and materials used in conducting training courses. Finally, the workshop focused on presentation skills, including use of PowerPoint and the development and execution of effective presentations. Workshop participants had the opportunity to learn more about policy issues in their home countries. A final activity helped participants apply the entire workshop by having teams identify a reproductive health policy issue from their country, use Spectrum to analyze the issue, and develop a PowerPoint presentation to advocate for their policy position.

POLICY/Egypt has also collaborated with the Cairo Demographic Center (CDC) to conduct a similar training course for 21 mid-level policymakers and reproductive health program managers on health policy analysis and presentation skills. The course was offered over a ten-day period from June 8–18, 2003, and included representatives of the National Population Council, the Egyptian Association for Family Planning, the Faculty of Medicine of Ain Shams University, the Health Affairs Directorate, and the National Council for Women, among other groups.

One of the objectives of this activity was for the content to become integrated into the diploma and certificate programs offered by the CDC. During the 2004 academic year, approximately 70 students from Africa, Asia, and Eastern Europe will be trained in different aspects of policy analysis.

- Policy analysis is being included in a course entitled "Analysis and Formulation of Population Policies with a Focus on Reproductive Health and Family Planning" and will include basic concepts, policy formulation, identification of alternative policies, and use of Spectrum. Similar issues related to policy analysis will be incorporated into two courses in the postgraduate diploma program.

- Advocacy training is also being included in a short training course entitled "Advocacy for Reproductive Health and Family Planning Issues."

- Spectrum is being introduced into a postgraduate diploma course on "Demographic Analysis Using Computer Software."

SPECTRUM Reaches a Ugandan University

Three workshops conducted in 2002–2003 served as the basis for introducing SPECTRUM into programs at Makerere University in Kampala, Uganda. The first two workshops introduced DemProj and FamPlan to trainees from the departments of Population Studies, Geography, and Applied Statistics and Economics; the Population Secretariat; the AIDS Control Programme of the Ministry of Health; the Uganda AIDS Commission; and the Uganda AIDS Control Project. The third workshop provided the opportunity for all previous participants to learn about AIM, EPP, and RAPID.

The university is now in the process of incorporating specific SPECTRUM models into undergraduate and graduate programs. For undergraduates, DemProj is being included in the course on basic demographic methods.

Similarly, FamPlan and AIM will become part of a course on the demography of Uganda. RAPID will be used in a course on social statistics. For graduate students, the models will be incorporated into coursework for the Masters programs in population and development and population and reproductive health. In addition, the models will be taught in the diploma program in demography, as well as in the Masters programs in demography and statistics. The incorporation of SPECTRUM into these programs provided opportunities for 150 undergraduates and 67 graduate students already enrolled in programs to become trained in the software and capable of using it as they enter their professional careers.

Filipino Universities Add SPECTRUM to Curricula

The Philippines is a third country where SPECTRUM has been a cornerstone of the POLICY Project's capacity-building activities. An initial training of 15 members of the University of the Philippines Population Institute (UPPI) led to SPECTRUM being incorporated into the graduate program in demography. The FamPlan module is part of the curriculum of the graduate course on family planning evaluation, a course required of students in the Masters program in demography. The UPPI is the leading academic institution for graduate training in demography in the Philippines.

POLICY staff also introduced SPECTRUM to faculty members and researchers from Silliman University and Central Visayas Polytechnic College. These two universities collaborated with the Negros Oriental Provincial Advocacy Network to use data as the basis for increasing support for family planning in the province.

Training officers of the Philippines Population Association (PPA), a nationwide coalition of professionals working on population and family planning concerns, has also contributed to SPECTRUM's dissemination. As a result of working with PPA, SPECTRUM is being incorporated into regional universities and six local government units (LGUs) in selected areas in Mindanao. One of those universities, Xavier University in Cagayan de Oro City in Mindanao, has now incorporated DemProj and FamPlan into the introductory course on demographic methods, which is taught to undergraduate and graduate students in the Department of Sociology.

A similar training course conducted by PPA and UPPI at San Carlos University in Visayas is leading to SPECTRUM being incorporated into a graduate course in sociology. The course is scheduled to begin during the summer of 2004. Also attending the SPECTRUM training course were health, population, and planning officers from nine LGUs in the province of Cebu.

SPECTRUM *for Advocacy*

Training professionals and students in SPECTRUM is providing a basis for using data to develop effective advocacy strategies and reproductive health policies. The range of issues addressed by the models—such as contraceptive prevalence and method mix, alternative interventions related to HIV/AIDS, and long-term consequences of rapid population growth—all inform advocacy and policy development on reproductive health, maternal health, and HIV/AIDS.

Strengthening capacity within a country to use SPECTRUM helps to ensure that data will continue to be used to inform policy. While the three examples described in this brochure illustrate different approaches to institutionalizing SPECTRUM into pre-service and in-service training, all three examples highlight the value of training students and professionals in the policy modeling program.

The POLICY Project is eager to build capacity to address policies related to HIV/AIDS, reproductive health, and maternal health. USAID missions and other donors can contribute to this endeavor by contacting POLICY Project offices in Washington, D.C. or in the countries in which POLICY operates.

To learn more about SPECTRUM, visit www.policyproject.com and select the "software" tab. SPECTRUM software and manuals can be downloaded free.

For more information, please contact:

POLICY Project, Futures Group
1050 17th Street, NW, Suite 1000
Washington, DC 20036

As of October 1, 2004:
One Thomas Circle, NW, Suite 200
Washington, DC 20005

Tel: 202-775-9680   Fax: 202-775-9694
policyinfo@tfgi.com

USAID

POLICY

The Spectrum Suite of Policy Models

Futures Group develops approaches to increasing leadership support for effective policies and programs that have been applied in the areas of family planning/reproductive health, maternal health, and HIV/AIDS. A key element of many of these approaches is the analysis of existing information to determine the future consequences of today's programs and policies. Computer modeling is an important tool in this work. The POLICY Project and its predecessor projects have developed a number of computer models for this purpose.

Spectrum is a suite of policy models that make use of a unified set of Windows-based commands that can be easily learned. The models comprising Spectrum are used to project the need for family planning/reproductive health, maternal health, and HIV/AIDS services and the consequences of not addressing needs in these areas. Most models are available in English, French, and Spanish. Some are also available in Portuguese, Arabic, and Russian. Each model includes a detailed user's manual that not only describes how to use the software but also includes sections on data sources, interpreting and using the results, a tutorial, and a description of the methodology.

Currently, Spectrum includes seven modeling programs:

- **Demography (DemProj)** makes national or regional demographic projections based on current population data and assumptions about fertility, mortality, and migration rates. A full set of demographic indicators can be displayed for up to 50 years into the future. Urban and rural projections can also be prepared. A companion model, EasyProj, supplies the data needed to make a population projection from the estimates produced by the Population Division of the United Nations.

- **Family Planning (FamPlan)** projects family planning requirements in order for programs and/or countries to reach their goals of contraceptive prevalence or desired fertility. It can be used to set realistic goals and to plan for the service expansion required to meet program objectives. The program uses assumptions about the proximate determinants of fertility and the characteristics of the family planning program (method mix, source mix, discontinuation rates) to calculate the cost and the number of users and acceptors of different methods by source. Various strategies can be simulated as a way to evaluate alternative methods of achieving program goals.

- **Benefit-Cost (BenCost)** compares the monetary cost of family planning programs to the monetary benefits in terms of reduced levels of social services required at lower levels of fertility. Benefits are defined as savings in government expenses on social services. BenCost is a module that allows planners to add the cost of health, education, and other social services to population projections created with the DemProj and FamPlan modules. BenCost can be used to study the long-term economic costs and benefits to society resulting from changes in family planning programs.

- **AIDS Impact Model (AIM)** projects the consequences of the HIV/AIDS epidemic, including the number of people living with HIV/AIDS, new infections, and AIDS deaths by age and sex as well as new cases of tuberculosis and AIDS orphans. AIM is used by UNAIDS to make the national and regional estimates it releases every two years.

- **Resources for the Awareness of Population Impacts on Development (RAPID)** shows the social and economic consequences of high fertility and rapid population grown on the labor force, education, health, urbanization, and agriculture. This program is used to raise policymakers' awareness of the importance of fertility and population growth as factors in social and economic development.

- **Prevention of Mother-to-Child Transmission (PMTCT)** evaluates the costs and benefits of intervention programs to reduce transmission of HIV from mother to child. Three different sets of interventions are included in the model: drug treatment (seven possible options); type of delivery (vaginal or Cesarean section); and type of infant feeding (formula, breastfeeding, or mixed). Outputs include a benefit-cost ratio as well as cost-effectiveness measures such as cost per HIV infection averted.

- **Adolescents (NewGen)** projects the characteristics of the adolescent population in terms of such indicators as school enrollment, sexual activity, pregnancy rates, prevalence of HIV and STIs, and marriage rates. The linkages among these indicators and the effects of policy changes can be examined.