Exploring Capacity for Integration: University of Michigan Population-Environment Fellows Programs Impact Assessment Project

by Denise Caudill

Abstract: Since 1993, the University of Michigan Population-Environment Fellows Programs (PEFP) has linked the population and environment sectors of development both at the field level and in policy analysis. The PEFP and Denise Caudill of World Neighbors launched the Impact Assessment Project to develop a framework for assessing an integrated program. This article addresses project findings, including the successes, constraints, and obstacles of integrated/linked programs, as well as provides field examples from Ecuador and Madagascar. Denise Caudill, the coordinator for this project, offers lessons on the implications of implementing integrated/linked programs from the community to the national, regional, and international levels.

For millions of people living in at-risk ecosystems around the world, issues of survival, food security, natural resource use, family health, and family size are inseparable, all simply aspects of life. In recent years, the global community has recognized that sustainable development, population, and the environment are interrelated, and approaches to address these issues should be gender-equitable and linked or integrated. The convergence of views is evident in the platforms and plans of action resulting from the 1992 UN Conference on Environment and Development in Rio, the 1994 International Conference on Population and Development in Cairo, the 1995 World Summit for Social Development in Copenhagen, and the 1995 Fourth World Conference on Women in Beijing. The great challenge is to transform these global policies and platforms into effective, measurable, and sustainable programs.

Since 1993, the University of Michigan Population-Environment Fellows Programs[1] (PEFP) has been placing Fellows with a range of organizations around the world attempting to link the population and environment sectors. Given the absence of clear models for linkage, the PEFP has taken a decentralized approach, allowing host agencies to define what they mean by a population-environment (PE) linkage or integration.

Opportunities to capitalize on these years of experience and the wide network of organizational relationships were identified in October 1998 following a U.S. Agency for International Development (USAID) evaluation of the program. Among the new initiatives launched at that time was an evaluation project to begin the process of developing a framework for assessing integrated program approach, process, results, and impact—the Impact Assessment Project.

The first phase of the project is now complete. Phase one was designed to identify hypotheses and assumptions concerning the process, impact, and value added of linked/integrated interventions, and to begin developing a methodological framework for monitoring and evaluating such programs.[2]

The strategy for phase one was to convene short roundtable meetings at the field level with integrated/linked program practitioners to enable those participants to:

- share experiences in planning, implementing, and assessing integrated/linked programs;
- identify challenges and benefits of linkage;
- define assumptions and hypotheses related to the value-added nature of integrated/linked programs; and,

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Denise Caudill is the Impact Assessment Project Coordinator for the University of Michigan's Population-Environment Fellows Programs project and Action Learning Coordinator, World Neighbors.

- discuss specific measurable outcomes, indicators of the integration/linkage and methodology for assessment.

Workshops and field visits were arranged and co-sponsored with CEMOPLAF [Céntros Médicos de Orientación y Planificación Familiar] in Ecuador and John Snow Incorporated (JSI) in Madagascar, as the local partners. Participants in the workshops represented a wide range of local and international organizations involved and interested in the integration/linkage of population and environment.

For example, CEMOPLAF, the national family planning and women's health organization in Ecuador, has partnered with World Neighbors, a U.S.-based development organization, to work with hard-to-reach indigenous populations in rural areas was highlighted as a successful integration program. The first phase (starting in the early 1990s) of the partnership involved training CEMOPLAF staff in people-centered, capacity-building approaches. This cooperation soon evolved into an experimental integrated program in the Guaranda canton, in the Bolivar province of Ecuador. After three years, CEMOPLAF conducted a survey to assess the impact of the program noting that attitudes about sustainable agriculture had changed appreciably as had family planning awareness in the villages using the integrated approach.[3]

The Impact Assessment Project (IAP) Coordinator developed a conceptual model and participatory methodology for use in the workshops. The "Capacity Tree for Linked/Integrated Programs" was used to identify and analyze the various components in linked/integrated population and environment programming: organizational capacities, predisposing and enabling factors, and linked program activities, results, and indicators. Following is rendering of the tree that the IAP Coordinator created.

Lessons learned concerning the challenges of planning, implementing, and evaluating integrated/linked programs have been drawn from the experience and are summarized below.

Conceptual Model and Methodology Developed for Workshops

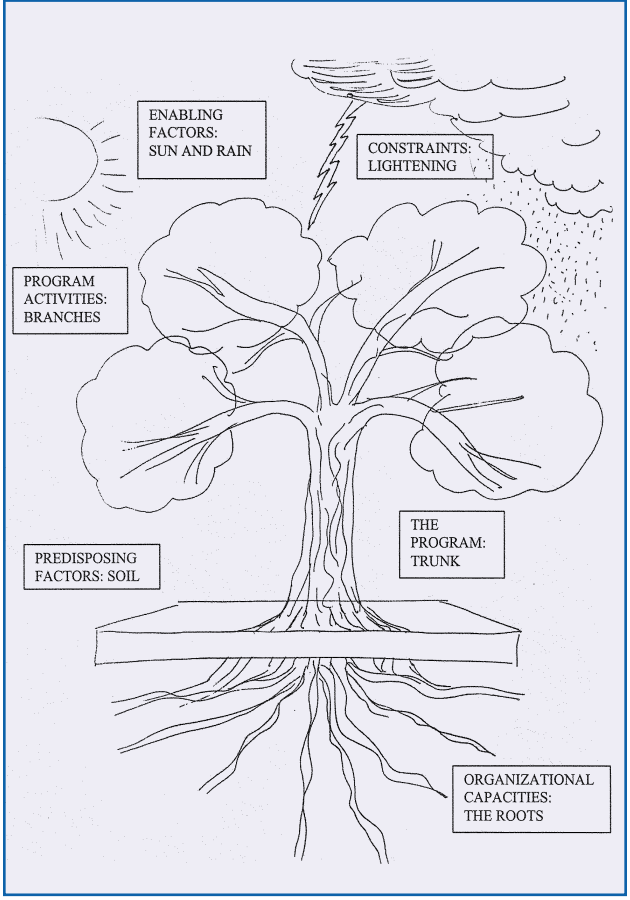
The conceptual model "Capacity Tree for Linked/Integrated Programs" proved to be useful in helping workshop participants identify and analyze the various components present in linked/integrated population and environment programming.

- The trunk represents the community or organization(s) through which the program takes place.
- The branches, limbs, and leaves represent the various program activities related to population, health, environment, and development.
- The roots represent the organizational capacities required to manage and sustain such programs.
- The soil represents the predisposing factors (economic, political, cultural, social environment) necessary for such growth.
- The sun and rain symbolize external enabling factors (resources, funding, services, positive leaders, and supportive policies).
- The lightening bolt represents external constraints and threats outside of the program's control.

Workshop Experiences

During this same period, two "Next Steps" meetings on population and environment integration brought

Figure 1. Capacity Tree for Integrated Programs



together practitioners in Washington, D.C.[4] These meetings reviewed progress to date on understanding if, how, and why linked interventions were effective and met targeted goals. Additionally, the sessions discussed ways USAID could integrate population-health-environment linkages into its strategic framework. The resulting ideas are blended in with those gained during the Ecuador and Madagascar field visits.

Key themes concerning the benefits, advantages, and reasons to integrate or link population, health, and environment were discussed in the Ecuador and Madagascar workshops and during the "Next Steps" meetings in Washington. Common factors were identified in all the meetings.

Benefits of Integration/Linkage

- *Obvious, Inherent Linkage*: Especially at the community level, life is naturally integrated. Problems have multiple causes and therefore need multi-disciplinary, multi-sector, and multi-level solutions.

- *Door-Openers:* Integrated programs allow for one activity to serve as an entry point for additional activities, by means of trust-building within the community and/or as a strategy for introducing new ideas and messages.

- *Community Based and Participatory:* Integrated programs require a high level of participation from the community people who are the principal actors, beneficiaries, and audience of the programs. Greater participation and capacity building can lead to more demand for services.

- *Responds to People's Needs:* Integrated programs are more responsive to community needs, are often community-specific, starting with the immediate priority needs of the people, regardless if those are population, health, or environment related.

- *Reaches More and Most Marginalized People*: The integrated approach has the potential to reach more people, especially the indigenous, marginalized, isolated, and under-served communities.

- *Strategy for Sustainability:* Among the results of an integrated program are outcomes that are more appropriate, concrete, and sustainable.

- *More Cost Effective:* Integrated/linked programs are seen to be more cost effective because of both practical (introducing two interventions at once is cheaper) and strategic reasons (working with organizations already known and trusted).

- *Greater Efficiency:* It is possible to avoid duplication, at both the program and community levels, and to manage, allocate, and leverage resources more efficiently while at the same time improving the work and reducing the effort.

- *Better Communication and Collaboration:* Integration improves communication, coordination, and cooperation between the program and participating communities and between the implementing organizations.

- *Improved Quality of Life is An Overall Goal:* Overall goals of integrated/linked population, health, and environment approaches are to improve the quality of life and well-being of people, and to achieve economic development and environmental equilibrium.

The common views held by participants, from policymakers to practitioners in the United States, Ecuador, and Madagascar, are positive indicators of the convergence of thinking at all levels about integration and linkage of population, health, and environment strategies. Other key factors mentioned at the field level in Ecuador and/or Madagascar were:

- Integration can facilitate access to and support by donors, and is a strategy to avoid "donor bombard-

Julio Beingolea, Ecuador Country Director for World Neighbors, CEMOPLAF's partner in integrated programs, reports back on small group results.

ment" at the program and community levels.

- Institutional learning and growth can come through taking a new look at program strategies, by integrating the needs of the community with the objectives of the institution.

- Integration can facilitate follow-up, information collection, and achievement of cross-cutting results and impact.

> "The integrated approach has the potential to reach more people, especially the indigenous, marginalized, isolated, and underserved communities."

Constraints and Obstacles to Integration/Linkage

Key constraints and obstacles to integration and linkage were also discussed in Ecuador, Madagascar, and Washington meetings:

- *Funding Challenges:* The most common constraints identified were related to a lack of funding, a lack of donors for integration, sector-specific funding and reporting requirements, and short-term financing. One hypothesis raised in the Washington meeting was that "invisible integration" may be taking place at the program level. Sector-specific funds go in and sector-specific reports come out, but integration may be happening, unknown to the donor.

- *Partnership Problems:* Difficulties in coordination among partners was the next most common constraint, with specific problems named such as absence of coordination, conflicting strategies, lack of continuity, varying stages of program development among partners, and simply a lack of quality partners.

- *Lack of Political Will:* Lack of policy and support by governments, multilateral, and bilateral agencies, along with weak administration or other political influences comprises a third key area of constraint.

- *Lack of Understanding of Integration:* There is no common set of goals and objectives for integration nor is there a common definition of the concept of integration. Thus, different and sometimes conflicting points of view persist between and within organizations.

- *Lack of Data and Evaluation Results:* There is a lack of data on the results of integration and a need for monitoring and evaluation of the complementary impacts, costs, and benefits.

- *Complex and Risky Integration:* The approach is more complex and complicated than single sector programs, taking time and resources, and requiring more coordination and planning, with risk of failure and staff overload.

- *Sectoral Specialization Still Dominates:* There are few dedicated "champions" for integration. Traditional structures, divisions, vertical approaches, and centralized decision-making still dominate the field.

- *Challenges at the Community Level:* There can be a lack of community trust of the implementing organizations, non-acceptance of new ideas, and lack of community organizations. For programs, the challenges involve dealing with complexities of the local socio-economic situation, lack of knowledge of the area, language, culture, and needs of the people.

Enabling Factors for Integration/Linkage

Key enabling factors for integration/linkages were also discussed at the Ecuador and Madagascar workshops. In some cases the enabling factors can be seen as countervailing forces to the previously listed constraints.

- *Political Will:* There do exist positive governmental policies, supportive commitments by local authorities and staff of government ministries, and

participation by international and national organizations.

- *Institutional Partners:* Some inter-institutional coordination does take place, competent intermediary actors are at work, and there is movement toward decentralization and eco-regional planning.

- *Available Funding:* There are some existing financial resources and donors, though not many.

- *Predisposed Communities:* Community interest and enthusiasm are seen as strong factors, with established community organizations and structures to build upon.

- *Know-how:* There are emerging local initiatives, available technical assistance, and existence of integrated program examples.

- *Need and Opportunity:* There are great needs in terms of population, health, environment, and sustainable development along with interest and support of the public to attain economic stability and preservation of the ecological richness.

Organizational Capacity for Integration

In each workshop, participants were asked to think more deeply about the organizational capacities they listed in the Capacity Tree exercise and determine what those capacities would be in an integrated program. Eight key capacity areas were identified and described in the workshops in both countries

Possibilities for Integrated/Linked Program Activities, Results and Indicators

Workshop participants also experimented with the idea of linking different sectoral activities and themes. In these exercises, groups developed possible linked activities, and anticipated results and indicators for assessment. The exercises were challenging and may have been the first time some participants seriously considered how their work might be more holistic and linked to other issues. Although the exercises were somewhat artificial, not tied to program objectives, and done quickly in small groups, the experience enabled participants to think in very practical terms about integration of activities across sectors.

Lessons Learned

Roundtable Workshops are a Valuable Opportunity for Networking and Sharing

The workshops conducted in Ecuador and Madagascar were successful in bringing together a new and wide range of participants to creatively share experiences in implementing integrated/linked programs. Evaluation feedback from all three workshops indicated that participants enjoyed and benefited from the opportunity to exchange ideas with other organizations, to establish new organizational relationships, and to envision potential networks of organizations committed to working in integrated programs. The mix of participants was broad, with individuals from USAID, local governments, international organizations and national NGOs, representing population and family planning, health, and environment sectors. These workshops can also serve as catalysts for future collaboration and action.

Capacity Tree Proves To be a Dynamic Analytical Tool for Systematic Discussion of Opportunities and Constraints of Integration

Use of the conceptual model, Capacity Tree for Integration, as the central analytical tool in the workshops was of great interest to the participants and lead to creative reflection and discussion. Constructing the tree to identify the components of an integrated program was the essential first step in each workshop, with the subsequent exercises, analysis, and discussion based upon the unique, immediate results in each workshop. The use of the tree to identify more than simply the types of activities that may be linked or integrated enabled the participants to reflect more deeply on the meaning, purpose, challenges, and strategies of integrating/linking population, health, and environment in their work.

Definitions of Integration Must Include Explicit Goal Statements for Clarity

Defining integration/linkage of population with environment, health, and development may be influenced by different implied perspectives of goals, that is, if integration is seen as an end in and of itself and/or a means to another end.

Population is Best Discussed in the Broader Context of Health

In both Ecuador and Madagascar the concept of population was somewhat problematic. It was more difficult for participants to list quickly the activities that can be described as "population" compared to listing health or environment activities. In general, people are

Table 1. Organizational Capacity

CAPACITY	DESCRIPTION
Holistic vision	Know how to perceive and relate humans with nature according to life experiences (Ecuador)
	Coordination of actions Strengthening capacity to conceive a model of integrated development (Fianar, Madagascar)
	Clarity of the program's mission, roles, objective, activities, target populations Results orientation There when most needed Good understanding of how the program fits with other actors and at different levels Operational research (Tana, Madagascar)
Community organization	Lends itself to problems, needs and celebrations of the community, with the participation of both families and institutions that work as a team, leaders and followers seeking community development (Ecuador)
	Competence in community-based approaches (PRA/RRA, PAR) Aptitude to work well with local communities Able to do an effective site analysis Value local customs and traditions and include them in implementation of program activities (Tana)
	Knowledge of : Culture Customs/Behaviors Demography Felt or expressed needs Geography Community social organization (Tana)
Inter-institutional coordination	Take advantage of all the existing resources in the community, to broaden the coverage, and the quality of services. Participatory. United missions and shared commitments (Ecuador)
	Mutual sharing of knowledge and information about objectives, approaches, strategy, domains of intervention Improved level of knowledge of each about all (Fianar)
	Existence of coordinating bodies (Fianar)
Project planning and evaluation	In accordance with satisfying the felt needs of the community and institution (Ecuador)
	Preparation of a comprehensive plan which also includes the unique details for each actor From the outset, plan follow-up and evaluate (Fianar)
	Evaluations performed with the community Identify the needs of the community and the solutions Respond to needs that are multidisciplinary in nature Multidisciplinary Include experts from each sector (Tana)

Table 1. Organizational Capacity (continued)

Technical expertise and know-how	To have available trained staff, teams and materials, planning, and adequate logistical knowledge of methodologies for work in accordance with the activity and the group objective (Ecuador)
	Valuing and capitalizing on what has been learned (Fianar)
	Knowledge of training needs for the personnel Background of personnel Experience of personnel Training in many technical areas or other integrated disciplines Multidisciplinary approach (Tana)
Mobilizing financial resources	Existence of sources of financial assistance in health, environment, and development (Ecuador)
	Identifying needs for material needs of each program actor Comprehensive management of resources (Fianar)
	Auto-financing, gifts, loans, in-kind assistance Problem to solve: sector financing limitations where it is often impossible to mix financial sources for an integrated program Possible solution: more coordination between donors, creativity, and diplomacy (Tana)
Mobilizing material resources	Be able to count on infrastructure and base resources in order to be able to respond to interrelated demands (Ecuador)
	Clear strategies to identify financial needs and to search for and negotiate financial support Mechanism to put in place appropriate strategies (Fianar)
	Vehicles, medicines, equipment, medical supplies, mobile health team supplies, tools, office supplies, other Items common to all: vehicles, office supplies, tools Items unique to each program: medical supplies, agricultural supplies (Tana)
Mobilizing human resources	Trained in health, agriculture, and environment and available to work in any situation with positive attitude, strong self-confidence, sensitive to social problems and conservation of the environment (Ecuador)
	Strengthening the capacities of personnel Posting/hiring according to competencies Conflict management (Fianar)
	Consultation and meetings among the stakeholders Conflict resolution training Use of mediators (Fianar)

more comfortable discussing population activities under the umbrella category of health or reproductive health for political, cultural, and religious reasons. This preference seems a reasonable and strategic approach but could be a cause for concern if health does not include population-related needs and activities. In an integrated/linked population, health, and environment program, there must be commitment and "intentionality" to ultimately undertake population activities, including family planning.

Intuitive Confidence in Integrated Approach is Strong

From world capitals to remote communities, people representing population, health, environment, and development disciplines intuit that integration works. It feels and looks good and seems the right thing to do.

Community Capacity-Building for Improved Livelihood at the Center of Integration

- Conduct community based needs/assets diagnosis in a participatory manner, with shared input, analysis, and negotiation by project staff with community members.
- Respond to community-identified and analyzed priority needs first and then build on successes achieved and trust created. This process is more sequential than simultaneous.
- Involve community in planning, implementation, decision-making—more than an instrumental act, the involvement is in terms of co-ownership and

Table 2. Organizational Capacity, Ecuador

CAPACITY	DESCRIPTION
Leadership	Working toward collective interests, being creative, democratic, facilitator, respect the participation of followers
Supervision by division	Specific, directed, periodic, coordinated, in a specific time period
Creation of policy and guidelines	To have very clear and specific policies and guidelines for the institution and community work for each activity
Credit policies	Motivate people and make possible the accessibility to development activities of improved communities
Decentralized administration	To have an adequate institutional organization with defined policies, objectives, goals, guidelines and procedures, trained and committed staff in/for the execution of integrated development programs

Table 3. Organizational Capacity, Madagascar

CAPACITY	DESCRIPTION
Learning	Strengthening the capacities for financial and project management Strengthening the capacity for analysis (Fianar)
Organizational adaptability	Realism and able to self-evaluate and learn from others Keeping abreast of the latest developments (Tana)

management of the program—with the project taking a true pro-poor, pro-community approach.
- Create and work through groups, not just individuals—women's groups, user's groups, forest protection groups, and health and development coordination groups.

Continuum of Projects: Bounded by Single Sector Approaches at One End and Holistic Integrated Programs at the other with Many in the Middle

Many integrated programs are more accurately co-existing to parallel single sector projects, planned, implemented, and assessed separately within a broader institutional definition of program. The Ecuador experience demonstrates that health, population, environment, and development actors can address their respective issues/problems with the same people or groups from different sector perspectives while at the same time each supports the others.

Integrated Implementation Is Essential No Matter the Model

Regardless of the model, implications for implementation of an integrated/linked program include the following points:

- Integration needs to begin in the planning stage, starting with the needs/assets diagnosis step, and

Table 5. Possibilities for Integrated/linked Program Activities, Results, and Indicators, Ecuador

SECTOR THEMES	LINKED ACTIVITY	ANTICIPATED RESULTS	INDICATORS
Improved guinea pig breeding AND Family planning by women in community	Visits to the community, practical training in family planning, and breeding of guinea pigs	50 women trained in FP and guinea pig breeding 20 women who use the FP services	Number of users of FP, Number of improved guinea pig, Increased income
Soil conservation AND Family planning by men in the community	Training of adults in health and agriculture and FP counseling	50 men trained in FP 20 men using methods of family planning they learned about in the training 10 hectares cultivated and protected against soil erosion	Number of men trained and Number of FP users, Number of hectares protected
Reproductive health AND Improved crop cultivation and production	During coordinated agriculture and health visits and work days, take PAP smears	Better knowledge of techniques for crop cultivation and technology for prevention of cervical cancer	Number of women that get a PAP smear among families that are using improved crop cultivation
Improved crop cultivation and production AND Family planning by couples in community	Home visits for counseling in family planning and crop production	Knowledge and use of the different methods of family planning and improvement of crops by couples visited	Number of couples visited that are using FP methods Number of experimental tests and demonstration plots
Soil conservation AND Reproductive health	Visits by medical team during program activities	Optimizing program resources in health and soil conservation	Number of users attending, Number of families trained in soil conservation

continuing through the setting of objectives, activities, indicators, and means of verification, through the implementation and assessment steps.

is more effective, efficient, and sustainable, there is little evidence other than impressions, anecdotes, hopes, and hunches.

> "[T]he global community has recognized that sustainable development, population, and the environment are interrelated, and approaches to address these issues should be gender-equitable and linked or integrated."

- Coordination by staff of work schedules, plans, worksites, IEC messages, and approaches—follow-up and data collection are essential.

- Decentralized decision-making and strong support from CEMOPLAF leadership are important components in the Ecuador experience—flexibility and responsiveness to community opinion are key to the trust-building process.

- A move from parallel to integrated implementation is a logical first step.

Valid and Reliable Evidence of Effectiveness, Efficiency, and Sustainability is Weak

Data are missing to substantiate the confidence in integration/linkage. Programs have not actually assessed the integration effect. Although people in Washington, Ecuador, and Madagascar felt strongly that the approach

Significant Need for Process and Tools for Planning, Monitoring and Evaluation of Integration

Processes and tools are lacking. In the rush to identify indicators for integration, thought must be given to new processes for blending the accepted and expected sector-related methodology and indicators with context-specific integration outcomes.

Post-ICDP Challenge Is to Demonstrate Value of Integration for Conservation Programs

Conservation projects are moving away from Integrated Conservation and Development Programs toward facilitation of eco-regional planning processes that involve national and international policy issues. Questions remain concerning the implications of this at the community and project levels. To what extent are the environmental conservation organizations willing and/or interested to be active partners in integrated/linked community level work?

Table 6. Possibilities for Integrated/linked Program Activities, Results, and Indicators, Madagascar

SECTOR THEMES	LINKED ACTIVITY	ANTICIPATED RESULTS	INDICATORS
Land improvements, training on soil fertilization AND Family Planning	Training/awareness raising of the people about FP and improving agricultural land	Increased level of contraceptive prevalence, Increased agricultural production	Number of regular users, Area of improved land
Reproductive health, migration AND Valuing natural resources	Integrating more youth into agricultural production	Productive youth at home, Increase in employment rate	Decrease in the level of unemployment, Surfaces cultivated and put in production

Need to Stimulate Donor Investment in Integrated Programming

Programs that would like to take an integrated approach often have to break down integrated strategies to develop sector-specific funding proposals, and after receiving the funding try to find ways to do the integration, yet ensure that the sector-specific results can be reported—the "invisible integration" phenomenon. Donors could be more supportive in furthering the integration approach by strongly encouraging project partners to conceive, plan, prepare, and present integrated grant proposals in partnership.

Plans for Phase Two

Convene More Networking Workshops and Events

Facilitate additional awareness-raising workshops bringing together a wider range of health, conservation, and development organizations as a vehicle for sharing experiences and forming networks.

Implementation of Monitoring and Evaluation Partnership Projects

Facilitate action research process in at least two countries to develop participatory methodology and tools for planning, monitoring, and evaluation of the integrated/linked programs and accompany the programs in the use of this methodology over three-year period.

Develop and Disseminate Participatory Action Research and Evaluation Tools

Document and disseminate research results and methodology framework for participatory monitoring and assessment of linked/integrated population, health, and environment programs. ■

NOTES

[1] For more information on the PEFP, see Shannon England, "Making a Difference at the Intersection of Population, Environment, and Security Issues: A Look at the University of Michigan Population Fellows Program," *Environmental Change and Security Project Report* 5 (Summer 1999): 73-81.

[2] For more information and to request a copy of the full report, contact: University of Michigan, Population-Environment Fellows Programs, 109 Observatory, SPH II, Ann Arbor, MI 48109-2029; Tel: (734) 647-0222; Fax: (734) 647-4947; E-mail: popenv@sph.umich.edu.

[3] Denise Caudill, "Integration of Population and Environment: World Neighbors People-Centered, Capacity-Strengthening Approach," *Lessons from the Field: Integration of Population and Environment*. Oklahoma City, OK: World Neighbors, 1998: 11-20.

[4] These "Next Steps" meetings were co-sponsored by the U.S. Agency for International Development, the Woodrow Wilson Center, and the University of Michigan Population-Environment Fellows Programs.