An Agenda for Population, Health, and Environment

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Earth's ecosystems and its human population are inherently connected. The fundamental relationships are fairly easy to grasp: Earth provides energy and raw materials for human activities, which in turn affect the ecosystems; damage to those environmental goods can adversely affect people's health and well-being. International attention to these linkages peaked in the 1990s, but innovative community-based initiatives continue to address them. This article explores population, health, and environment (PHE) connections, identifying our accomplishments, current challenges, and priorities.

What have we accomplished?

Around the world, many programs address PHE connections by incorporating reproductive health into environmental protection programs or vice versa. Local conservation groups, national governments, and international organizations are using integrated interventions in the world's biodiversity hotspots and tropical wildernesses. These new approaches integrate family planning and conservation activities in community-based projects, through which ecologists, health specialists, and community development experts link factors like environmental stress, fertility, migration, women's health, women's educational status, and economic decisions.[1]

Local communities welcome integrated interventions because they reflect the reality of people's lives. Water shortages and unclean water affect their children's health. Areas of high biodiversity often attract migrants, increasing the impact on natural resources. Unchecked coastal development may pollute coastal waters, damage fisheries, and ultimately reduce economic opportunities, food security, human health, and marine resources.

When local communities are empowered, they can sometimes convince decision-makers to address these issues in an integrated manner. Some institutions, such as government committees charged with integrating PHE concerns into national development strategies, promote sustainable development and encourage collaboration across ministries and government departments. As a result, policies to solve broad problems like food shortages may address a wide range of issues, such as migration, intensified industrialization, and food imports. Short-term solutions for a single sector are unlikely to be effective over the long term.

Some donors are supporting integrated work. In the United States, PHE funding increased in the late 1990s, but this growth has been fueled by only a handful of foundations, such as the David and Lucile Packard Foundation and the Compton Foundation, and public sources like the United States Agency for International Development and the National Institutes of Health. The total amount of integrated funding, however, is only a small percentage of overall population and environmental funding (Gibbs, 2003).

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New models and technology address PHE linkages. Technological advances have enabled farmers to grow more food on less land, cities to clean wastewater, and nations to protect areas of significant biodiversity. In India, for example, communities have used new technologies and community mobilization to convert open-access natural resources into community-controlled resources, thereby increasing the residents' incomes from forest products and protecting the area's biodiversity (McNeely & Scherr, 2003, pages 46-47, 234). In addition, research-based programs and policies have enhanced environmental protection and improved human well-being. Examples include Zimbabwe's experience decentralizing wildlife user rights in the CAMPFIRE program, which was adopted in other Southern African countries, and the National Biodiversity Institute (INBio) of Costa Rica's bioprospecting initiative, which was adapted by projects in Mexico, Indonesia, and the Philippines (World Resources Institute, 1997).

Why have we not done more?

Examining, designing, implementing, and funding integrated work is a continuing challenge. A common stumbling block for researchers, program managers, local communities, and donors is how to "do integration." PHE scholars and practitioners have not settled on a unifying methodology. Program documentation tends to target the funding agency and should be disseminated broadly so that other program managers can determine when to apply an integrated approach. Similarly, decision-makers grapple with how to apply integrated policies across sectors, budgets, and regulations. And donors remain largely wedded to traditional sectoral funding approaches, only occasionally dabbling in cross-sectoral experiments.

The complexity of these linkages clouds the appropriate intervention points. Intuitively, linking population, health, and environment issues makes sense. This link is less clear, however, when other variables, such as technology, culture, economics, or politics, come into play. What kind of interventions will have the greatest impact? If we want to preserve old growth forests, should we fight corruption that awards favorable concessions to rapacious logging companies, or should we prevent migrant workers from moving in? These interventions are difficult to evaluate, partly due to poor-quality data on the factors driving change.

Collaboration is complicated by major differences in paradigms, assumptions, and definitions. Reconciling different (and sometimes contradictory) conceptual approaches is complicated by divergent methodologies and the conflicting interests of individuals, communities, organizations, and governments.

Business as usual often stymies collaboration. Some organizations are reluctant to add a program in another sector, like a conservation organization providing family planning services, even if it would maximize their impact. They do not have the resources, expertise, or staff capacity, and they feel that such efforts would divert them from their stated mission. Similarly, donors fund projects according to specific program areas, and when funding is tight, they fall back on more established programs. At the community level, integrated programs may be constrained by cultural and religious norms, especially when addressing sensitive issues like the role of women in natural resource management or voluntary modern family planning methods. Traditional practices, cultural differences, or powerful interests may block integrated efforts to change the status quo.

The exclusion of "influentials" impedes implementation. Influentials (e.g., journalists, important community members, and political, civic, and religious leaders) can shape policy and influence attitudes and behaviors. When influentials are excluded from a research project or program, they may not support its recommendations. Journalists, for example, need simple ways to explain the demographic and health dimensions of environmental stories, a news "peg" that can sell the story to their editors, and access to information and experts. If the media are included in projects and given opportunities to report, they could help bring PHE issues to

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the attention of policymakers and the public. If included, policymakers may also better understand the applicability—as well as the legal, budgetary, and regulatory implications—of research results.

Messages do not clearly illustrate how integration helps constituents. Researchers, advocates, and program staff need to develop simple, evidence-based, and compelling messages that convey the importance of integrated programs. Such messages could help, for example, a conservation organization understand how addressing human migration furthers its conservation goals, an adolescent reproductive health program justify adding a community conservation program, or a policymaker recognize that food security and economic opportunities increase when community members voluntarily choose to space their children and preserve mangrove forests.

PHE data are difficult to find and compare across sectors and scales. Demographic and ecological data are not collected at comparable geographic scales. Demographic surveys are usually conducted within a political region, such as a district or country, whereas environmental data cover a particular ecosystem or landscape, often crossing political boundaries. In addition, it is difficult to find data at local levels, such as data on migration in particular communities.

Wide-ranging project indicators inhibit developing common thresholds and standards. Determining how much to invest without a standard method for measuring and evaluating success can be difficult. Similarly, without a common set of approaches for implementing integrated programs, managers face a difficult question: should they partner with other groups to complement their skills or develop integrated expertise within their staff? Should all of a program's interventions have population, health, and environment dimensions or should separate departments set parallel population, health, and environment goals?

Limited timeframes and uncertainties inhibit political will. Demographic and environmental change can be slow, uncertain, and imperceptible over the short term. Researchers are refining methodologies, field practitioners are testing approaches, and advocates are building a body of evidence. However, this process could take many years, and this timeframe is out of sync with electoral terms, funding cycles, and immediate needs.

What should we do now?

Increase understanding of PHE linkages and their impacts. We need to reach policymakers, researchers, and the public by effectively disseminating critical PHE information. We must:

- Determine the information needed by policymakers and communities to make decisions and provide it in formats suitable for non-technical audiences;
- Identify those aspects of PHE, related to urgent development needs, that are most applicable for research and policy;
- Initiate and coordinate research projects that test methodologies, address topics relevant to current policies, and can influence policy deliberations and decisions; and
- Develop indicators that can measure success and demonstrate the value added by taking an integrated (instead of a single-sector) approach.

Strengthen advocates' abilities to focus policy attention on key PHE issues. To build momentum for PHE integration, advocates must trumpet success stories and express its advantages in terms that appeal to constituents. We need to:

- Explain to environmental organizations why population is key to their work, and explain to population organizations how environmental analysis furthers their objectives;
- Convince donors to increase and sustain funding for PHE research, programs, and advocacy by tying PHE interventions to development priorities, garnering political will, demonstrating tangible benefits to local communities, and encouraging foundations to fill funding gaps left by government and bilateral aid;

Table: Challenges in addressing population, health, and environment linkages

	Category of Challenges			
Audience	**Methodology**	**Collaboration**	**Communication**	**Measurement**
Researchers	Limited theoretical literature	No incentive to collaborate across disciplines	End users (e.g., communities and policymakers) are not included	Data are not available and/or comparable across sectors and scales
Program managers and staff	Approaches are not documented	Lack of cross-sectoral partnerships and staff capacity; possible "mission drift"	Lack of integrated program messages and coordination across departments and programs	Lack of monitoring and evaluation indicators
Communities	Appropriate points of entry are not identified	Cultural and religious traditions (among others) discourage change	Integration's relevance to community priorities is not demonstrated	Data are not available at appropriate scale
Donors	Long-standing traditional divisions	Lack of coordination within donor agencies and among donors	Integration is not linked to legislative priorities	Return on investment is not measured
Policymakers	Lack of policy examples	Accountability is spread across budgets and spheres of responsibility	Integration is not linked to constituents' priorities	Short political timeframes make integration politically unpalatable and infeasible

- Conduct expert seminars for journalists, increase their understanding of technical issues, and suggest investigative techniques and leads for covering PHE linkages; and
- Give policymakers examples of approaches they can use and frame policy issues in terms of constituents' needs.

Increase capacity for cross-sectoral programming and funding by providing technical assistance. We must:

- Develop materials (e.g., workshops, manuals, toolkits) to help key actors, such as wildlife conservationists, health promoters, and coastal managers, integrate demographic analysis into environmental decision-making and programming;
- Help population specialists at the regional and country level access state-of-the-art information and provide methodological advice for addressing these issues in policy work and population-development programs;
- Share tools and approaches, such as project design and evaluation methods;
- Explore ways for natural and social scientists to contribute to field-based programming; and
- Improve reproductive health services by integrating population and environment programming.

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Build expertise to contribute to policy decisions. Field practitioners should learn to mobilize and train others, advocate policy change, and communicate effectively. We need to:

- Conduct training sessions to help researchers and advocates communicate with policymakers;
- Create, support, and strengthen local PHE networks and build coalitions; and
- Develop approaches and materials that use environmental data to advocate for population and reproductive health issues.

Putting Lessons to Work

In 2003, with support from the Compton Foundation, Population Reference Bureau (PRB) conducted a PHE case study, "Generating Political Will for Population, Health, and Environment." The case study summarized an eight-year process that led to the adoption of gender equity policies and action plans in the environmental agencies of every government in Mesoamerica (Central America and Mexico). PRB reviewed project documents, surveyed and interviewed project staff, and carried out field-based observations.

The case study documented policy successes (policy changes, allocation of funds, workplans, ministerial declarations); identified factors that influenced the policy agenda, such as donor interest, international agreements, and political events; examined the role of key groups or policy champions, including NGOs like IUCN-The World Conservation Union; and observed the importance of disseminating information—through media reports, policy briefings, research reports, presentations, ministry documents, and site visits—to garnering government attention. The results demonstrated that the actions described in this article can mobilize political will on PHE issues.

Project partners set the policy agenda by framing the issues so that government bodies would be receptive. In this case, the links between gender and the environment were presented as a human rights issue. This was important for some countries, such as Costa Rica and El Salvador, as it highlighted international conventions to which their governments had subscribed.

International actors and partners played an important role by focusing attention on gender and environment. Donors from the Netherlands, the Canadian International Development Agency, and the World Bank worked with civil society for over four years on a number of collaborative projects. As a result, governments recognized the importance of gender and environment integration and started working with civil society actors on these issues.

Information and indicators helped create awareness. By presenting results from collaborative projects, civil society helped show policymakers how gender differentials affect environmental policies and programs.

Influentials, particularly policymakers, were involved from the beginning. NGOs worked closely with governments from the start: IUCN, for example, is an international organization whose membership is composed of governments and NGOs, and the Institute of Mexican Women, an influential NGO coalition, has worked closely with the Mexican government for many years.

Influential coalitions kept PHE issues on the policy agenda long enough. IUCN had already been working on gender and environment issues for five years when it was approached by government agencies. A large network of agencies, champions, academic institutions, NGO coalitions, a regional policy commission, and donors kept the gender and environment connection on the agenda long enough for policy to change. In all, it took eight years to convince the governments to incorporate gender into their environmental mandate.

These findings confirm that PHE experts can use a systematic process to influence policy:

- Raise awareness through targeted information dissemination;
- Set the agenda by getting policymakers to

recognize the importance of the issue; and
- Build coalitions by working with a variety of actors to keep the issue on the policy agenda long enough for change to occur.

This process may enable PHE programs to prioritize activities, establish benchmarks and indicators of success, and determine if efforts are sustainable.

Conclusion

When we link population policy and reproductive health interventions with environmental management, we improve our health, our economy, and our children's future. Researchers can, and must, educate policymakers and the public. Informed policymakers can address these complex long-term issues by implementing policies that balance far-reaching benefits with short-term costs. Local communities can empower themselves and effectively manage their environment, while simultaneously improving education, primary health care, livelihood opportunities, and the status of women. Ultimately, these approaches will help us match development needs with policy interventions in a rapidly changing world.

Notes

1. Close to 50 of these projects have been documented. See Riesenberger (2002, page 5); Engelman (1998); Vogel & Engelman (1999); and United Nations Population Fund (2001, pages 50-51).

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