

Outlook

Family planning and the environment: Connected through human and community well-being

Media headlines increasingly draw our attention to climate change as a top global issue and remind us of the many linkages between population and the environment.^{1,2} While these linkages have been discussed in the past, interest in this relationship has recently been piqued, viewed through the climate change lens.

“Population” is related to but not the same as family planning. Family planning is an essential basic health service and one of the most cost-effective health interventions for developing countries,^{3,4} positively impacting the health of women, children, families, and communities.⁵⁻⁷ It is relatively simple to provide, and can be added to other health interventions (e.g., malaria prevention and treatment) or serve as an introductory step to strengthening local health services. Importantly, it can be integrated with or serve as an entry point to other development interventions, especially regarding female empowerment.⁸⁻¹⁰ Population initiatives on the other hand

aim to balance a country’s population size, economic and social development needs, and resource availability, including natural resources.^{11,12}

Family planning has been specifically introduced within the climate change environmental context as a cost-effective means of mitigating global warming. It has also been lauded as a means of helping vulnerable families adapt to the increasingly harsh local conditions anticipated as a consequence of global warming.¹³⁻¹⁵ While global environmental challenges are important, the focus herein is on environmental issues at the local level—specifically in remote, ecologically fragile areas where access to organized health services (including family planning) is limited. It is at this local level where the strength of the family planning/environment (FP/E) relationship is most acute and where programmatic experiences integrating the two are richest.*

This issue of *Outlook* aims to provide readers with an enhanced appreciation of the FP/E relationship in such remote areas and, through case studies, of tested approaches for extending family planning reach into these areas. These communities suffer disproportionately from environmental degradation and associated poor health and low-income consequences.¹⁶ The efforts described here are particularly innovative with regard to adapting to the special conditions and needs of rural subsistence communities that depend on dwindling natural resources. This focus therefore speaks to family planning practitioners seeking innovative ways to reframe a key tenet of family planning work—its role in reducing social inequity.¹⁷⁻¹⁹

Historical differences in intentions and lingering distrust of motives for linking the population and environment domains have led to hesitation among some sexual and reproductive health and rights groups to embrace FP/E linkages.^{20,21} This article

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*Numerous terms have been used throughout the years to describe initiatives incorporating family planning and environment components, including population/environment, population/health/environment, community-based population environment, and reproductive health/natural resource management, among others. The acronym FP/E is used in this report.

aims to promote increased cross-discipline dialogue and action among various interest groups (environment, family planning, population, rights, and general development actors) by reviewing past thinking about the linkages and presenting a fresh perspective within a 21st century context; i.e., how family planning and the environment relate within the context of “well-being.”

“Well-being” is a term increasingly being used among environmentalists (see box, page 5), including as an objective of conservation efforts. Viewing family planning through the lens of individual, family, and community well-being establishes common ground with environmental concerns and provides a means for pursuing equity as a common goal.^{2,22,23} The case studies (page 3) exemplify the possibilities and challenges of operationally linking FP/E interventions on the ground. The Philippines and Uganda are both known for their biological “wealth” and are struggling to ensure sustainable development in remote rural areas.

A history of key linkages

Sustainable development and individual rights

The Programme of Action (POA) from the landmark 1994 United Nations International Conference on Population and Development (ICPD) in Cairo endorsed principles of sustainable development, including balancing resource availability and population growth as well as integrated population and environmental policies and programs.^{13,24,25} The ICPD POA also offered a new emphasis on the central role of women’s sexual and reproductive health and rights in achieving sustainable development.^{13,25,26} This position, the Cairo Consensus, reoriented development approaches toward concern for individual rights.

Since then, family planning programs have significantly contributed to improved maternal and child health, gender equity, economic development, and the demographic transition in many countries throughout the world.^{27,28}

These outcomes, albeit at modest scale, have also come about in select, ecologically fragile areas through community-based programs, including linked FP/E initiatives.

Ecosystems and human well-being

Historically, humans often have been considered as separate from their natural surroundings.²⁹ Later consideration of human/nature interdependencies, or ecosystems, gained momentum after the turn of the century, in the context of the United Nations “Millennium Ecosystem Assessment.” The assessment explored the consequences of ecosystem change in terms of human well-being as defined in terms of five key components: health; basic materials for a good life; security; freedom and choice; and good social relations (see box, page 5).³⁰

The assessment findings appear in detail elsewhere.³¹ A key finding is that the world’s poorest citizens—in particular, those who depend directly on nature to meet their basic needs for food, water, fuel, and clothing—suffer the consequences of dwindling natural resources the most. High fertility and population growth are among the root causes.³² These communities are ill-equipped to deal with natural disasters, which may occur with more voracity and frequency with change in the global climate. The assessment also observed that the negative consequences of ecosystem change fall mostly on the world’s most vulnerable subgroups of people—women and children.³³

Integrated FP/E program experience

Early years

While integrated programming over the years has not been extensive, there have been some notable efforts. Most well-known among environment-sector efforts were the integrated conservation and development projects of the late 1980s and 1990s. Through these, partner nongovernmental organizations (NGOs) offered select economic and health interventions to communities surrounding targeted protected areas (e.g., corridors, landscapes, seascapes, and full ecosystems). The guiding principle was that community members would more likely protect the environment if they also benefited from its conservation.³⁴ Family planning was among the health interventions supported to meet community needs in at least some countries (e.g., Madagascar).³⁵⁻³⁷ This experience opened the door for continued cross-sectoral collaboration to increase access to family planning in remote communities of conservation importance.

Many lessons learned from early experiences are still applicable today (see box below). To make real headway, however, efforts needed to be expanded to greater scale. For the conservation community, this meant working in larger geographic units than protected areas alone to ensure both conservation and human well-being outcomes. For the development community, including

Key lessons learned on linked FP/E interventions

- Extend family planning access to remote areas.
- Reduce costs to deliver family planning in remote areas by working with environmental groups whose activities target such areas.
- Encourage community receptivity to both family planning and natural resource management interventions.
- Engage community men in family planning discussions and action.
- Engage community women in discussions and action regarding natural resource management.
- Improve gender communication by bringing men and women together.
- Reduce program costs by sharing resources across both domains, including technical expertise.³⁹

health and family planning actors, this meant replicating effective integration strategies and approaches into more communities, over longer time periods.^{35,38}

Two important factors have challenged scale-up: (1) lack of scientific evidence on the value of integration, and (2) lack of a standardized programming roadmap for others to follow. Scientific studies to establish causality have proven difficult because the causal pathways linking the two domains are multiple and interwoven.⁴⁰ Further complicating matters, linked FP/E approaches often need to be adapted and contextualized to the local situation. If standardized approaches were easy and effective in such areas, the need for special effort would not remain so great.

A push for evidence and a roadmap

To provide stronger evidence and help to create the missing roadmap, additional funding for FP/E integration became available at the turn of the century. Specifically, in 2001, the David and Lucille Packard Foundation supported integrated “population and environment” activities in subsistence communities near biodiversity-rich areas in a number of countries. An operations research component was added to projects in Madagascar and the Philippines to test hypotheses about the added value of linking interventions in time and space versus single use of tested sector approaches.^{41,42} Overall, there were impressive increases in contraceptive prevalence in the two countries where, previously, family planning use was low, simultaneous with reductions in negative environmental practices (e.g., burning in Madagascar and fish poisoning in the Philippines). Improvements in food security were also observed—a key underlying rationale for linking interventions (see the Philippine case study for more details).

Also in 2002, the US Agency for International Development (USAID) added momentum through its newly established population, health, and

environment (PHE) program within the agency’s Office of Population. Among the program’s funded activities, conservation organizations familiar with priority biodiversity areas were invited to develop integrated community-based projects that incorporated a family planning component. A 2005 evaluation of the USAID and Packard-funded programs confirmed that this kind of integrated approach leads to positive outcomes in both domains and at a low cost per project beneficiary.⁴³

Direct USAID/PHE funding ended for a number of field sites in 2008. However, funds were allocated to expand global PHE knowledge and capacity (Building Actors and Leaders for Advancing Community Excellence in Development, or the BALANCED Project) as a means of making greater headway and scaling up. The five-year project supports country training in PHE approaches and development of a PHE toolkit as part of the Knowledge for Health portal (www.k4health.org). The latter provides easy access to the growing literature on experiences with and value-added of integration, as well as tools to help develop the roadmap. Through these strategies, the project aims to build on and foster more field-based PHE initiatives at scale.

Case studies: Promoting well-being in the Philippines and Uganda

Philippines

Dramatic declines in marine fish supplies, driven by worldwide increases in consumer demand, directly affect those dependent on fish as their main protein source. Nowhere is this more evident than in the Philippines, a nation of more than 7,000 islands, where every citizen lives within 45 miles of the coast.⁴⁴ Fish from municipal waters used to provide the majority of dietary protein for rural Filipino coastal dwellers, but catches no longer meet this need.

Recognizing the imminent protein and food security crisis, in the 1990s, the government established numerous



An adolescent girl weaves mats as part of a IPOPCORM microcredit project in the Southern Philippines.

protected areas.⁴⁵ The protected areas alone, however, could not fully mitigate the crisis, as the number of coastal dwellers continued to increase through migration and natural growth. Appreciating this, several organizations designed integrated coastal resource management projects that also incorporated a family planning component. One such initiative, called IPOPCORM (Integrated Population and Coastal Resource Management), was launched in 2001 in Palawan and Bohol provinces by PATH Foundation Philippines, Inc.

IPOPCORM currently operates in eight provinces of the Southern Philippines, where marine conservation is a priority. The project incorporates a focus on youth (ages 15–19 years), as 50% of the country’s population is younger than 21 years.⁴⁶ Through training, teen peer educators learn how to promote the concept of stewardship within a dual context—stewarding both the environment and their own sexuality.⁴⁷

Adult peer educators serve in a similar capacity, sharing information about family planning and safe sex practices with all community members, and encouraging men to refrain from destructive fishing methods such as using dynamite and poisoning with cyanide. Contraceptive supplies are made available through support to small store owners. Municipalities have contributed to the sustainability of the community-based distribution approach by providing commodities,



A farmer harvests seaweed as part of the alternative livelihood component of the IPOPCORM project.

funding, and training. To help reduce demand for fish, the project includes an alternative livelihood component (e.g., seaweed farming) and micro-credit for community women. And to help with marine conservation, IPOPCORM and its partners helped establish or strengthen 71 marine sanctuaries and other marine resource stewardship programs in the focal areas. To strengthen program integration, some of the trained family planning volunteers also serve as conservation wardens: again a dual stewardship role.

Since its inception, IPOPCORM has substantially improved the lives of approximately 400,000 villagers in more than 180 villages.^{38,48} Household income increased almost 20% from 2003 to 2006.⁴³ And, impressively, family planning use almost doubled, from 43% to 83%. While there is still considerable unmet need for family planning country wide, this project is helping to ensure that some of the poorest, rural, coastal citizens have family planning access, in addition to food and livelihood security. The secret of its success? Beneficiaries noted that “the project fits with our life style,”⁴⁷ and provides a comprehensive context for people to “recognize the necessity of limiting family size to achieve food security and improve their family’s welfare.”⁴⁹

To provide additional scientific evidence regarding the added value

of integration, an operations research project was carried out in three sites over six years using a quasi-experimental design. Site 1 had support only for family planning and other reproductive health interventions, and Site 2 had support only for coastal resource management interventions. Site 3 included both types of intervention in an integrated manner. Findings revealed that Site 3 performed significantly better for a number of measures, including contraceptive use during first sexual experience, biophysical condition of corals and mangroves, and sustainable fishing practices. The results confirmed that integrated projects could not only deliver on single-sector objectives but could contribute to the achievement of objectives in multiple sectors in a coordinated way. For remote areas where sectoral management approaches have not made a major impact, working with communities to address multiple needs could be what makes the difference.

Uganda

Ten hours’ drive from Kampala brings you to the bustling town of Buhoma, the northern gateway to Bwindi National Park. Bwindi is home to approximately half the world’s remaining mountain gorillas and many other unique plants and animals. The park is also a valuable natural resource; it feeds a large watershed, is a source for traditional plant remedies and wild honey for local communities, and is an eco-destination for thousands of tourists annually. Proceeds from admission constitute more than 50% of the country’s tourist income, and income from local hotels, tourist shops, and park-associated jobs (e.g., porters, guides) contribute substantially to local revenue.

Bwindi has a hard edge; that is, there is no longer a buffer zone between its border and community fields. The park boundary is natural—no fences—and gorillas frequently raid field crops for food. Increasing human/wildlife contact has resulted in negative impact for both sides. Families immediately adjacent to the park are often poor and can

not absorb food losses, so some parents keep children from school to chase the gorillas away.⁵⁰ For the gorillas, because they are genetically similar to humans, any contact, direct or indirect, can result in exchange of infectious diseases such as tuberculosis (TB).⁵¹ Conservation Through Public Health (CTPH), a Ugandan NGO, was established in 2002 specifically to address these interwoven issues. CTPH aims to reduce threats to wildlife conservation by improving human and overall community health together with wildlife and livestock health. Co-founded by a veterinarian, the principle of prevention through primary care applies equally to the health of humans and wildlife sharing the same environment.

There is great need for family planning in this region. District health officials support family planning, but system constraints (e.g., shortage of contraceptive supplies, staff turnover) and strong cultural traditions favoring large families have limited method uptake. However, CTPH’s work with local communities to reduce crop raiding and reduce disease sharing has opened the door for the introduction of family planning as another key intervention. With USAID/PHE funding, local groups were commissioned in 2006 to create entertaining plays for the community, incorporating interwoven themes of livelihood, family size, family health, and gorilla health. PHE community volunteers give village health talks and peer education. Specially trained community volunteers provide additional counseling and methods to interested users, and work with peer educators to educate their communities about family planning, TB, HIV/AIDS, good hygiene, and sanitation.

In two years, 28 volunteers visited more than 2,000 households, 40% of which lie close to the park boundary. Approximately 300 women accepted a contraceptive method for the first time, a rate four times higher than projected based on historical trends (G. Kalema-Ziknsoko, unpublished data, 2007). Of note, community-based provision of injectables by trained volunteers

was added to expand the range of methods available, a good example of “task shifting.”

The jury is still out regarding long-term effectiveness of the interventions, but in the short run, the Uganda strategy seems to be working. The project is now extending to other districts and parishes bordering the park, where similar conditions exist. Additionally, a local NGO has replicated the model (including community-based provision of injectables) to extend access in needy areas not bordering the park.

Implications for practice

What do FP/E relationships mean for family planning?

Integrated FP/E interventions are a particularly effective entry point to help secure community trust: for example, when community theater or counseling materials interweave messages; when community meetings and project planning cover two or more domains; or when volunteers are trained and function in cross-discipline roles (e.g., agricultural extension workers distributing both crop seeds and condoms). The above also have potential to involve women in sustainable development and men in family planning—in other words, to cross the gender divide, a barrier to family planning uptake and potentially a root cause of environmental degradation.

For staff in advocacy positions, this article hopefully adds strength to arguments for universal access to family planning. Disparities in well-being are predicted to increase over time, with the most vulnerable populations and population subgroups continuing to suffer the most. In light of the importance of climate change, National Adaptation Programmes of Action (NAPAs) are being developed to outline priority climate adaptation actions for consideration by the United Nations Framework

Linkages become clear when considering well-being

The Millennium Ecosystem Assessment, launched in 2001, places human well-being at the core of its framework, dependent on intact ecosystems and biodiversity.⁵³ With its emphasis on equity and through its five defining components, the well-being concept provides a more comprehensive picture of the interrelations and interdependencies between family planning and the environment than a traditional, demographics-centric perspective. Examples related to each of the five components are presented below.

Health

Among the five components defining well-being, historically “health” has provided the most obvious common ground for integrated FP/E programming. For example, family planning contributes to family health by ensuring healthier mothers and children.^{5,7,27} And family members in good health can be more productive, reducing the likelihood that destructive environmental practices will be undertaken for short-term survival needs.

Basic materials for a good life

Access to clean air and water, income, and livelihoods are among life’s basic needs. In rural areas with degraded ecosystems, women may spend many hours each day in search of fresh water, food, and fuel. This reduces time available for other activities, such as harvesting crops for food or income and accessing family planning or other health services. The smaller families of family planning users in turn need fewer resources and put less pressure on the environment.

Security

Access to food sources and food security are critical concerns for many subsistence-level families. A healthy environment and access to natural resources, including food, renders such households less vulnerable and their futures more secure. With increased security, the focus of household decision-making can change from meeting daily survival needs to addressing needs for the future. In addition, decisions regarding family size and birth spacing can be more deliberate. When unmet need for family planning is addressed, continued access to food sources is more likely.

Freedom and choice

The Millennium Ecosystem Assessment defines freedom as “the opportunity to be able to achieve what an individual values doing and being.”³⁰ Clearly, being able to choose when to have children and how many to have is fundamental to this freedom. Opportunities to invest in one’s children and oneself (e.g., through schooling and employment) increase when unmet need for family planning is addressed, and even more so when environmental conditions ensure health and the basic materials for a good life. A convergence of reproductive rights and environmental equity fits well with a focus on “justice” across geography, generations, and gender.

Good social relations

For subsistence-level families vulnerable to environmental damage, unsustainable use and/or loss of common resources undermines social cohesion. Conversely, interventions that reduce individual and household vulnerability and improve resource security help to strengthen relations. Social mobilization techniques that bring communities together around themes of interest to both men and women and across generations similarly provide an opportunity to improve social relations. Linked FP/E efforts that focus attention on relationships between the environment, family planning, health, livelihood, freedom, and security have proven useful for this purpose.

Convention on Climate Change. Many NAPAs mention population growth as a factor exacerbating vulnerability, but few suggest family planning increase as an adaptation strategy.⁵² Family planning advocates can help inform this discussion by promoting family planning and referring to the multiple ways it contributes to human well-being (see box, page 5).

In order to maximize the positive environmental impact of family planning work, programs can facilitate increased access in rural areas—in particular, in remote communities dependent on remaining natural resources. Improving clinic-based services in such areas is an important strategy but likely a long-term process. In the interim, expanding community-based family planning services would help fill the gap. To do this may require reassessing and updating national family planning service delivery guidelines governing who can provide which contraceptive method at which level of the health delivery system. To this end, “task shifting” to community-level workers was proposed and recently endorsed by the World Health Organization and other key stakeholders as a strategy to increase access and family planning uptake.

Increased access to long-term and permanent methods in remote areas would also complement community-based delivery of short-term contraceptives. Also needed is support for approaches to successfully extend the contraceptive supply system to the community level. Social marketing and use of small shop entrepreneurs are tested approaches known to work in remote communities, including ecologically fragile areas.^{48,54}

Family planning programs also can play an important information sharing role by incorporating sessions on FP/E linkages into basic education or in-service training. Materials to design such sessions, including manuals and monitoring and evaluation guides, can be found online (see box, page 7).

What do FP/E relationships mean for the environment or sustainable development domains?

Conservation projects partnering with local communities in remote areas are familiar with the value communities place on improving their health. Individuals with an environment or sustainable development background can help their colleagues understand and articulate that the immediate health and empowerment benefits of family planning are as important for environmental conservation as its longer-term contribution to reduced family size.⁵⁵ Advocating for family planning on this basis demonstrates concern for individual and family well-being. As this article has hopefully shown, those outcomes also are environmental outcomes (see box, page 5).

Successful family planning uptake depends on effective functioning of all program components, including linkages with the overall health delivery system. Environment and development programs can facilitate this in a number of different ways. For example, sustainable development projects in remote rural areas can help extend the supply system and ensure that contraceptive methods are locally available. In addition, they can help deliver family planning interventions through the social and community networks with which they have already established trust (e.g., water use or land planning committees and farmers’ cooperatives). Another possibility is to support cross-training of community resource persons.

Local environmental health officers, where they exist, are trained to focus on problems such as household access to clean water, vector control, and sanitation. Unfortunately, ecological factors, or the ecosystem of which communities are a part, often are not considered. Assisting local health officials to embrace a broader systems perspective could contribute to eliminating root causes of environmental

degradation, some of which also act as barriers to family planning use (e.g., poor local governance or socioeconomic factors).

Conclusions

There are multiple areas of mutual benefit for integrated family planning/environment programming in the context of human well-being (see box, page 5). The “freedom and choice” component is equally relevant to environmental conservation, reproductive health, and women’s rights and empowerment actors. And both family planning and the environment have important roles to play in ensuring family and household security. In the past, linking family planning and the environment was perceived by some as too concerned with population size at the expense of attention to individual rights and aspirations. Slowing population growth by addressing unmet family planning need within a well-being context reinforces the broader goals of equitable and sustainable development and justice.

The Millennium Ecosystem Assessment reveals how changes in the environment are not being equitably experienced. Similarly, disparities exist in access to family planning. In both instances, poor rural women are among the prime losers. More collaborative family planning and environmental efforts aimed at reducing inequities would better ensure sustainable community development as well as the right of individuals to achieve what they value. This strategy fits with recommendations from a recent survey among family planning experts regarding how to recast the central message of family planning, highlighting its relevance to reducing social inequity.⁵⁶ It also helps meet needs not being addressed through conventional family planning approaches, needs that may respond well to new perspectives, new approaches, and new partners.



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Family planning/environment resources

Over the years, a number of organizations have taken an active role in helping extend access to family planning in ecologically fragile remote areas. The resources listed below are particularly useful.

2007 US Agency for International Development (USAID) programming manual on integrating population, health, and environment projects
www.ehproject.org/PDF/phe/phe-usaid_programming_manual2007.pdf

Population, Health and Environment (PHE)—What's New? (USAID)
www.ehproject.org/phe/phe_whatsnew.html

Family Planning and the Environment (United Nations Population Fund)
www.unfpa.org/rh/planning/mediakit/docs/sheet3.pdf

Population & Environment (Population Action International)
www.populationaction.org/Issues/Population_and_Environment/Index.shtml

Healthy People, Healthy Ecosystems (World Wildlife Fund manual on how to integrate health and family planning into wildlife conservation projects)
www.worldwildlife.org/what/communityaction/WWFBinaryitem10254.pdf

PHE basics e-learning course, available through USAID's Global Health eLearning Center (free registration required)
www.globalhealthlearning.org/login.cfm

The PHE Policy & Practice Listserv (Woodrow Wilson International Center for Scholars)
www.wilsoncenter.org/index.cfm?topic_id=1413&fuseaction=topics.item&news_id=404371

East Africa PHE listserv (Population Reference Bureau)
www.prb.org/Articles/2009/rwandaphenetwork.aspx



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ISSN:0737-3732

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This issue was written by Lynne Gaffikin. It was edited and produced by Jennifer Kidwell Drake, Scott Wittet, and Beth Balderston. *Outlook* appreciates the comments and suggestions of the following reviewers: John Cleland, Patricia Coffey, Leona D'Agnes, Roger Mark De Souza, Cara Honzak, Jane Hutchings, Gladys Kalema-Zikusoka, Bonnie Keith, Nuriye Ortayli, and Pamela Phillipose.

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