

Population, Health, Environment: What Works and Why

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Introduction

At its core, Population, Health and Environment (PHE) is a way of recognizing and addressing the interrelationship between humans and the rest of nature and their intersecting needs. Historically, efforts to purposefully link the two were commonly referred to as population-environment (PE). Over the past eight years, the term PHE has come into use as a distinct PE subset. PHE refers to an “approach” to integrating development interventions on the ground, linked to environmental conservation. Specifically, PHE aims at increasing access to family planning (FP) and related health services while simultaneously helping communities manage their natural resources, with the dual goals of improving people’s health and livelihood and conserving wildlife and other biological resources [1]. The term PHE also refers to the growing “community of practice” of project implementers, advocates, trainers and researchers.

This report was commissioned to address the question of what works and what doesn’t work to make PHE programs successful – the most successful being those with the potential for scale or expansion. Findings were derived from document reviews, web searches and interviews with members of the PHE practice community. The report aims to reveal how PHE has evolved to fill an important gap, i.e., a tested approach to working cross-sectorally that achieves results in multiple domains. Its evolution has been both directed and natural. Direction, and ballast, has come from core funders and a group within the community of practice. “Ground-truthing” has come from the vast array of other practitioners. Integration is not easy but with time, resources and skill, it can be successfully achieved under a variety of conditions. Key factors facilitating success are described within. Under select conditions, the approach can work at scale. What scale is most relevant depends on the conservation goal and human/environment interactions.

History

The history of PHE is often described in terms of three phases: Pioneering Efforts (up to 2002); Next Generation Initiatives (2003-2008); and PHE’s Current Face (2009+).² In large part, this division represents the history of change in funding sources and priorities. As mentioned throughout, the David and Lucile Packard Foundation has played a key role in bringing PHE to its current state. To date, USAID has been the other key PHE funder. A short historical summary is provided below; more details on the history of PHE are provided in Appendix 1.

PHE’s first phase involved both site-based projects and global advocacy. Two important international conferences set the stage: the 1992 UN Conference on Environment and Development and the 1994 UN International Conference on Population and Development. Both called for the integration of population and the environment in the context of sustainable development. The latter reinforced this message through a rights-based lens. Neither forum,

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² The division into three phases is commonly accepted. The names were provided by the author for descriptive purposes for this report.

however, produced any formula for realizing integration on the ground. To meet this challenge, a group of US-based population, health, development and conservation organizations came together to discuss optimum ways of integrating across sectors to achieve conservation and human well-being goals. The members shared some key values: the belief that conservation is a social issue, a commitment to participatory community engagement, and a dedication to increased women's involvement in community decisions including related to natural resource management. The Packard Foundation among others provided advocacy funds for a number of the group members in those early years.

The group searched for ongoing site-based projects that exemplified their shared values and goals to inform their efforts. One member, Population Action International (PAI), with support from the Summit Foundation, inventoried 40+ such community-based PE projects [2]. In 2000, the Packard Foundation provided support critical to advancing PHE through its site-based, leadership and advocacy subprograms organized under the (then) PE program. Two of the sites - Madagascar and the Philippines - have since taken integration to the largest scale and continue to serve as models. An important factor making scale-up possible was complementary advocacy, leadership and research support from a number of Packard-funded awardees, e.g., the Population Reference Bureau (PRB) and PAI [3].

USAID also contributed to PE leadership development and some site-based implementation during Phase 1. Starting in 2002, USAID's investment came in response to legislative language that supported the use of agency funds for "Family Planning/Reproductive Health (FP/RH) where population growth threatens biodiversity or endangered species" [4]. Early funding went to a number of conservation organizations, working in areas of high biodiversity importance e.g., Jane Goodall Institute (JGI), World Wildlife Fund (WWF) and Conservation International (CI). The purpose was to demonstrate conservation group ability to expand access to FP/RH to remote rural areas, and meet other community needs, while also pursuing conservation objectives. Through these projects, they learned the importance of health as an "entry point" for gaining community trust. In 2005, the term PHE officially replaced PE for all USAID-supported efforts. Over time, as noted, the new nomenclature came to define a specific, tested approach. USAID also provided advocacy and leadership support during Phase 2 to maintain that momentum.

In 2006, USAID shifted its focus from on-the-ground projects to building greater capacity to implement, a focus which it still maintains. The goal was for site-based PHE funding to come from other sources including USAID country mission budgets. This has been successful in a number of cases (e.g., Tanzania and the Philippines). Current USAID funding is mainly through the Building Actors and Leaders for Advancing Community Excellence in Development (BALANCED) project, lead by the University of Rhode Island/Coastal Resources Center (URI/CRC). Its key objectives are capacity building and knowledge management to increase the global pool of capable PHE practitioners and advocates. In this phase, PRB developed a computer mapping program to track changes in the number and location of global PHE projects. Ethiopia hosts a large number of them, facilitated through Packard Foundation support. A new Phase 3 model project is Health of People and the Environment-Lake Victoria Basin (HoPE-LVB). It targets communities around the Lake Victoria Basin, a MacArthur Foundation ecosystem priority, and is MacArthur-Packard co-funded, with monitoring and evaluation (M&E) support from USAID.

PHE funding overview

An analysis of the years 1993-1996, immediately post the two international conferences, identified 35 foundations that had provided funding support related in some way to the *global population-environment* nexus [5]. In a 2003 update covering the years 1999-2001, the following were listed as the main PE supporters: Packard, Hewlett, Summit, Turner, Geraldine R. Dodge and Compton and the UN Foundations [6]. Peilmeier's Packard PE Program Evaluation highlighted how the Summit, MacArthur, Hewlett and Turner Foundations all ended any explicit PE strategies around the same time as The Packard Foundation's PE Program ended [3]. However, several continued to fund strategies or programs in "Population" and/or "Environment" and were willing to "let linkages occur naturally" in a target geographic area, if the grantee wished to do so.

In 2007, USAID provided some funding out of the Health Bureau's Population and Reproductive Health (PRH) office budget explicitly for *PHE*, a term formally put into use in 2005. Also in 2007, Hewlett provided PE funding to 4 US conservation organizations for national and global PE advocacy and Packard funded 3 such organizations. Those efforts are not counted by some as PHE contributions per se, however, as they did not have a community focus. On the other hand, some foundations like Hewlett provide "general support" to organizations, funds from which may support PHE programs or efforts as they themselves prioritize, e.g., PRB and PAI [4].

In PHE's current phase, a few foundations have provided funding *explicitly* for PHE, most notably the Packard Foundation with its support to Ethiopia and HoPE-LVB. Some PHE funding has also come from European aid organizations. USAID funding for any site-based PHE efforts comes from mission contributions to the PRH Office's BALANCED Project whose main objectives, noted above, are PHE capacity building and knowledge management. A few organizations e.g., PRB and the Woodrow Wilson Center /Environment Change and Security Program (WWC/ECSP) support PHE advocacy and information sharing through other USAID funding mechanisms. Potential sources of future PHE support, explicitly or more indirectly, are described at the end of this report.

Lessons learned: What works and doesn't work to make PHE programs successful?

For this report, PHE represents a pro-environment, gender-sensitive, integrated approach to community development, designed to yield local conservation and human well-being outcomes where interdependencies are strong. Success is influenced either by features affecting site-based implementation or affecting supportive advocacy, capacity-building and research activities.

What works?

A. Site-based projects

PHE project success is determined to a large extent by the capabilities of the implementing organization and project partners. The appropriateness and quality of project interventions also matter, as do some site characteristics.

Organizational capacity is the most important factor determining success

PHE projects work when staff can gain and maintain the trust of beneficiary communities and successfully shepherd an integrated community development process along. Staff need to be skilled in the various PHE technical areas as well as how to successfully integrate across domains. They must be able to identify and document results and sustain partnerships. Most implementing organizations described herein have demonstrated capacity to lead; PFPI has been particularly successful in this regard which has helped it take PHE to scale in the Philippines.

Successful projects successfully partner

PHE projects work best where community members are key partners. The health/FP component of conservation group-led projects can be more technically sound when a health partner is actively involved. This increases project attractiveness to health stakeholders including donors. Many projects have functioned successfully this way, e.g., JGI in Tanzania with EngenderHealth. Partnering with community development groups maximizes conservation outcomes by increasing ability to respond to non-health needs of high or urgent community priority. Projects with strong government relations can tap into those resources e.g., training support

Madagascar – “Like every place you’ve never been”: A Model of PHE Success

All of Madagascar is considered of biodiversity importance. It is one of the poorest nations, health/FP services are not widely available and fertility levels are traditionally high. Its PHE experience serves as a model of “what works” to sustain and scale integration. Initial cross-sectoral partnering resulted from expressed community needs including for FP. Pro-environment NRM activities were first integrated with community-based health/FP activities using a “champion” approach: communities became champions upon achieving target levels of “doable actions.” Their collective success, widely celebrated, motivated continued pursuit to higher levels of sustainable community development.

Momentum was maintained and scaled from 2001-2005 with Packard Foundation funding to the Madagascar Green Healthy Communities (MGHC). Solid funding for PHE allowed time in which to test, refine and measure how integration best works in the local context. Many lessons were applicable worldwide. As the approach caught on elsewhere in the country, a Malagasy network was established – and still functions - as a platform for cross-sharing and advocating in support of integration to achieve conservation and development objectives both in a food and livelihood security context. A comparative study was launched involving network members to provide evidence of the approach’s value.

Before Packard funding ended, the USAID mission launched an “ecoregional” strategy, focusing all its development support around priority ecological landscapes to maximize impact. Activities were organized under an integrated framework -Nature, Health, Wealth and Power (NHWP) - that drew heavily upon PHE best practices from the MGHC project. The champion approach, with government support, was scaled for use at administrative levels higher than communities. Ecoregional alliances provided a second platform for cross-sectoral learning and collaboration. The President’s 2003 “Durban Vision” and “Madagascar Naturally” national campaign for economic development reflected PHE principles.

The country’s PHE experiences have been featured in films, presentations and policy briefs; projects sites have been prime destinations for field visits by key decision-makers including US Congress members. The model gained momentum until the coup in 2009 at which point funding for many site interventions diminished. Local organizations continued to integrate with available funds and, slowly, new PHE practitioners began to surface once they learned about the value of integration and how to implement in the Malagasy context. One such organization, Blue Ventures, with some European aid funding now stands out as a strong PHE example. In this way, Madagascar is continuing to serve as model of success, i.e., PHE integration is being sustained over time based on its own merits.

and commodity supplies that increases the potential for sustainability and reduces costs. It also increases acceptability and confidence knowing that interventions meet with official approval. This is the approach being employed, for example, by HoPE-LVB.

Successful projects make use of available reference documents

Success is determined based on achievement of results. Key to this is identifying what is doable and what is considered of value to stakeholders. To help meet USAID expectations, an M&E manual for PHE projects was developed as well as an online e-learning course. WWF developed a design manual for conservation groups interested in incorporating FP and the BALANCED Project provides training in PHE objective setting for practitioners. Successful projects make use of these valuable resources.

Ecosystem type matters less than the local human/environment relationship

PHE projects have been implemented with success in coastal and dryland areas, in mountains, around wetlands, around a lake basin and, in forested areas other ecosystem types. Understanding how ecosystem degradation affects local community well-being is key to successful project design, for any ecosystem type.

The best locations are where public health/FP programs are not well established

PHE projects have been implemented with success in Africa, Asia and Latin America. PHE funding for Latin America stopped as FP services became widely available through national programs, making *integration* less attractive. In Asia, programs have been successfully implemented where such services are not easily available and where biodiversity/ecosystem conservation is a priority e.g., parts of Nepal, the Philippines and Cambodia. All of Madagascar is a biodiversity “hotspot” and a number of successful efforts have been carried out throughout the island nation; similarly, in East Africa. There are many areas in Africa that remain good candidates for the PHE approach due to intersecting conservation and human health/FP needs.

The best health interventions are ones for which environmental linkages are the most direct

PHE projects have been tested successfully incorporating a number of different health interventions. For example, nutrition was a focus for CI’s projects in Madagascar. Tuberculosis control is a health feature of Conservation Through Public Health’s (CTPH) efforts in Uganda and sanitation and hygiene is a part of HoPE-LVB. Environmental causal linkages are usually the most direct with water and food-related health issues. Energy-efficient stove interventions are often successful as they address respiratory infections and deforestation simultaneously.

Natural Resource Management (NRM) interventions improve livelihoods and reduce conservation threats

Many different NRM actions have been successfully tested that also serve to reduce important conservation threats. In Madagascar, WWF helped communities redevelop their traditional NRM systems after years of colonial, then government control. JGI around Gombe has successfully

supported tree-planting and agro-forestry practices. In HoPE-LVB, support for more sustainable fishing practices is being provided.

B. Advocacy, Capacity building, Research

Communities and nature benefit directly from PHE site-based interventions but without complementary advocacy, capacity building and research, on-the-ground projects would not succeed. These efforts better ensure project success when they are customized and adapted to local realities.

Advocacy works best when framed for specific audiences

As audiences have different interests, the most effective PHE messages are ones customized for audience appeal. One of the most impressive examples of PHE advocacy was the 2002 introduction into legislative language of wording favorable to an integrated approach. This resulted from advocacy, in particular by PAI, highlighting the urgency of avoiding irreversible biodiversity loss in areas with remaining unmet need for FP. The language change has led to years of USAID PHE funding. Packard Foundation support to PAI helped produce this important policy outcome.

Supporting networks of practitioners helps the message be heard

Initiatives that have successfully scaled are ones in which PHE lessons learned have been shared through a network of field projects operating within the same geographic focus (e.g., ecoregion). Examples of this are in the Philippines, Madagascar and Ethiopia. Network members, speaking with one, loud voice can advocate more effectively than groups alone for additional resources and/or program or policy change. A successful example of the latter is in the Philippines where the PHE network, long supported by PRB including with Packard Foundation funds, effectively advocated that FP be considered a local policy issue, in the absence of a national policy [7].

For relevancy, successful PHE advocacy draws upon ongoing site-based projects

Advocacy about PE interdependencies has drawn heavily from global statistics, including Millenium Ecosystem Assessment findings. While global analyses help set the stage, localized data more adequately tell the PHE story. Field projects often provide the only source of detailed information about PHE. Thus, successful PHE advocacy, at all levels, draws upon ongoing field projects to be relevant.

Successful advocacy mixes data with compelling, personal stories

Field projects provide a wealth of testimonials regarding how integrated projects have improved people's lives. Quotes from and videos of community members help "bring alive" otherwise conceptual ideas. This in turn helps decision/policy makers better envision how support for PHE could make a real difference. Various PHE videos have been developed over the years with this in mind. PRB has successfully trained country journalists to write such stories. PAI has also systematically organized PHE site visits over the years for congressional representatives.

Similarly, field-based practitioners who personally experience the positive effects of integration typically become strong PHE advocates. The Woodrow Wilson Center's ECSP systematically promotes PHE by featuring such presenters as well as movies, publications and a blog to lend PHE a more personal face.

Measuring and sharing results confirms success

To be considered successful, projects must provide evidence of results. This requires clearly defined indicators and systems in place to turn data into information. To reduce extra burden on project participants and help sustain efforts, successful projects use national or locally available tools. HoPE-LVB is incorporating this best practice as part of its project monitoring system. Rigorous studies provide more convincing evidence of approach effectiveness. A well-conducted study by PFPI in the Philippines, supported by the Packard Foundation, successfully serves this purpose. Not all projects can produce impact data however if local conditions do not meet to study design requirements.

What doesn't work?

A. Site-based projects

Project experiences over the years have revealed useful strategies for approaching new communities and also for maintaining community participation, both critical for success. Also, while conducted in many locales, PHE projects are not appropriate nor have they been successfully carried out under all conditions.

Approaching traditional communities using an unfamiliar lens may not open doors

While gender equity in conservation and development is a fundamental PHE value, it may not be considered a high priority for targeted communities. Rather, livelihoods and income generation are usually key interests, particularly among community leaders with whom project staff usually first interact. Successful PHE projects appreciate how to incorporate gender equity as a project value over time, in context-appropriate ways.

Lack of flexibility to add new interventions can reduce community engagement

For long-term conservation outcomes, practitioners need to continuously monitor community priorities and try to help address them. This can be a challenge without flexibility in funding unless the project can attract additional partners. WWF learned this through past experience so formed an overarching alliance with CARE, a strong development partner [8].

Projects lose focus when wide spread, without a unifying geographic framework

Early on, JGI's community-centered conservation initiative in Tanzania was spread across many miles, in some cases requiring a multiple-day boat ride to access project areas. A 2002 evaluation highlighted how spread thin efforts were, reducing project ability to effect significant change, in particular in communities adjacent to Gombe [9]. JGI subsequently focused in and launched a

new initiative, the “Greater Gombe Ecosystem” for which clear geographic boundaries were determined based on ecology and chimpanzee survival needs, linked to local communities.

Projects are needed but struggle in isolated areas without partner connections

By nature, PHE projects are often in remote areas without good access to public services. Success demands effective introduction of various interventions but for most organizations, doing so alone is difficult. Finding partners in remote areas or ones able to travel there has presented challenges. For example, due to site remoteness in the Democratic Republic of the Congo (DRC), WWF had problems identifying a willing FP partner. Local faith-based groups may be interested in partnering in health but not necessarily in increasing FP access, a core feature of PHE projects.

Insecure areas with cannot be well supervised which hinders success

Providing ongoing support is difficult in unsafe areas e.g., rebel activity, as has been the case in parts of the DRC and Kenya’s northern coast. Without a local presence and occasional supervisory visits, project momentum slows. Additionally, natural disasters e.g., cyclones, as experienced periodically on the coast of Madagascar, can shock fragile ecosystems on which communities depend and reverse gains made in project development.

B. Advocacy, Capacity-building, Research

Two particularly challenging areas for PHE have been producing sufficient evidence to justify opportunity costs of using the approach, and maintaining the PHE human resource pool.

Poorly conducted studies can lead to credibility loss

The PHE community is often asked to better demonstrate the effectiveness of an integrated approach. While a few studies have tried to produce such evidence, only PFPI’s study in the Philippines has yielded solid findings. Conducting quality studies of community-wide interventions is difficult; adding PHE’s integrated features and site remoteness makes such studies even more challenging. Solid evaluations should be a feature of all projects but some organizations also lack these skills or adequate resources. More active partnering with researchers/academic institutions, like the University of Colorado, could help fill this gap.

When champions and other leaders move on, PHE advocacy suffers

One of the earliest efforts to build capacity to integrate FP and conservation was through the Michigan’s Fellows Program that placed fellows throughout the world in a variety of organizations. In many cases, it was the fellows that lent organizations the capacity to lead. Most fellows became passionate PHE advocates and developed unique skills in how to make integration happen. A number have managed to remain involved and continue to provide leadership. Unfortunately, many have moved on, unable to apply their unique integration skills. This has been a loss to the PHE movement, reducing return on overall PHE investment.

Current And Future Areas of PHE Opportunity

As discussed, PHE has become a distinct area of practice with associated principles, standardized tools, shared communication materials and networks of practitioners. What it lacks to “stay the course” is dedicated funding. Some practitioners are able to set aside funding for PHE from other sources e.g., “Population” or “Environment” programs. New and other initiatives provide additional opportunities for applying PHE’s best practices. A few of these are described below.

Climate Change/Disaster Mitigation

Climate change provides an important lens through which conservation groups are organizing and prioritizing actions. Increasing resilience of vulnerable women, families and communities is a current development strategy within climate change discussions. Avoiding natural disasters is another. Donors considering these strategies include: UN Population Fund, UN Development Programme, USAID and AusAid, among others. Incorporating FP into climate adaption plans is one way of improving resilience. PHE projects can provide a useful testing ground for this and community adaptation over time. PAI and WWF/CARE, through their Climate Advocacy Partnership, are among the organizations pursuing this approach.

Food Security

The PHE approach has been used successfully to address food security in a number of places e.g., Madagascar and the Philippines. At the Gates Foundation, food security falls under their largest program, Agricultural Development, directed at sustainably increasing farmer production for long-term reduction in hunger and poverty. UK’s international aid organization, Department for International Development, has joined Gates in addressing world food security as has USAID through their Feed the Future Initiative, among others.

Peace/Security

The interface between population, environment and human security has been repeatedly highlighted in WWC/ ECSP presentations. Peace and security are new themes for some, e.g., CI a long time PHE partner, and old themes for others, e.g., the Skoll, MacArthur and Compton Foundations. Using the PHE approach could help achieve their peace and security goals.

Water

An increasing source of conflict throughout the world involves water availability. Various conservation PHE practitioners have a water program for which they have been able to attract funding from private industry e.g., The Nature Conservancy (TNC) and Nestle’s Waters Community Program. Coca Cola also provides funds for water linked to community development. USAID has supported the integration of water, sanitation and hygiene (WASH) activities into a number of PHE projects in the past and this could be another potential entrée for PHE in the future.

Human Rights

Water mobilizes people as it is needed for life and is also a human right. A “right’s based approach “to conservation has recently been embraced by 8 global conservation organizations, some active PHE partners [10]. The rationale for why they came together around “rights” closely mirrors that which brought PHE partners together in the early 1990s. Available PHE resources and lessons learned could thus provide a major jump-start to this effort. The right to FP is something about which women’s groups and RH/FP advocates feel strongly and therefore rights-based strategies provide another potential opportunity for PHE integration. Promoting human rights and equality is one of the main goals of the European Union (EU), a major global aid donor. A number of PHE practitioners have already successfully tapped into EU and other European aid donor funding for their programs. The Hewlett Foundation is supporting PAI specifically to network with European aid agencies with strong or latent interest in RH/FP to tap into those funding sources.

Country Strategic Plans, Millenium Development Goals (MDGs)

The World Bank provides development support to various low-income countries to help achieve poverty reduction through their country assistance strategy and poverty reduction plans. Eradicating extreme poverty and hunger is MDG #1 and PHE has been used in some countries (e.g. Madagascar and the Philippines) to address poverty reduction as an overarching theme, as well as other MDG targets (e.g., achieving universal access to FP – Target 5B – and reducing biodiversity loss – Target 7B). Thus, the approach could be considered as a viable strategy to include within poverty reduction plans and to help achieve other national goals like the MDGs. Where decentralized planning is taking root and local government pays for development, the PHE approach may be particularly attractive as local planners more readily appreciate the value of synergy through integration. Specifically, where local officials are accountable to the central government for results in many domains to receive their budget allocation, they are more likely to consider program efficiencies – one of the various advantages of the integrated PHE approach.

Unmet Need for FP

Many foundations and USAID continue to support the goal of addressing unmet need for FP. This provides continuing opportunity for PHE programs to fill the gap. At the Gates Foundation, FP falls under their Global Development Program; at the Hewlett Foundation, it falls under their Global Development and Population Program. This placement sends an important message that FP is an important *development* intervention development – a theme emphasized at early international conferences linking population and the environment.

Women in Development/Women’s Empowerment/Gender Equity

Positioning PHE as a woman-focused strategy re-emphasizes one of its core principles. In 2012, USAID adopted new policies and strategies to help reduce wealth-related gender disparities and to increase women’s ability for self-determination. PHE is a particularly useful approach to achieving those ends. The International Union for Conservation of Nature (IUCN) has long played a key role in bringing population and environment partners together and is actively

working to integrate gender into conservation including via climate change discussions. They are doing this with support from different Scandinavian country aid agencies, another opportunity.

Conclusion

According to PRB's current PHE mapping program, over 87 projects with funding from a variety of sources are applying the PHE approach in 27 countries in Asia, Africa and Latin America. Through these efforts, FP is successfully *reaching remote areas previously not well served and communities are better managing their natural wealth* – the dual goals of PHE efforts. There is thus continuing return on investment in PHE through global expansion in projects and donors. While 87 is only a marginal proportion of all development initiatives, the approach is not appropriate for all locales. It was designed for, and intended, for locales where FP service access is poor and community practices constitute threats to biodiversity and ecosystem conservation. Some of the 87 are long-term efforts showing the continued usefulness of the approach. This is critical to long-term conservation success and also the goal of universal FP access– a human right.

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Appendix 1: Brief History of PHE

Phase 1: Founding Principles and Pioneering Efforts

There is a long history to discussions on the relationship between population dynamics and environmental conservation (PE). In 1991, a seminal document on the importance of considering women's role in sustainable development, along with population growth, conservation and consumption - *Caring for the EARTH* - was co-produced by the International Union for Conservation of Nature (IUCN) [1]. The following year, at the UN Conference on Environment and Population, Agenda 21 was developed calling for integration of the two domains in the context of sustainable development. In 1994, at the UN International Conference on Population and Development, this position was reinforced through a rights-based lens. In that context, increased access to voluntary family planning (FP) was discussed as an important means of achieving sustainable development. These international forums provided an important platform for articulating the multiple pathways through which FP contributes to sustainable development, over and above change in fertility and family size, e.g., greater women's empowerment and gender-equity. The conferences were also critical in terms of lending international support for bridging the two domains of "Population" and "Environment" towards a common goal. However, they produced no specific formulae for doing so on the ground.

Around this time, agencies committed to sustainable development and the critical role of FP in achieving this end, especially through gender-related pathways, began to dialogue about how they could test and promote approaches to integrating population, environment and development interventions. To that end, in 1995, Population Action International (PAI), began to inventory all initiatives in which natural resource management (NRM) was being combined with reproductive health (RH) services, always including but not necessarily limited to FP. With support from the Summit Foundation, PAI compiled 40+ examples, evenly spread over three regions (Latin America, Africa, Asia) of what they called community-based population and environment efforts [2]. Their analysis revealed important similarities and differences in ways in which integrated PE efforts historically and at that time were being implemented. A notable similarity was that FP had been incorporated in response to expressed need from local communities, particularly women [3].

Featured in their report were projects of another Summit Foundation awardee - World Neighbors - an organization dedicated to people-oriented development around the globe since the early 1950s. Family planning had formed part of its integrated community development programs from its earliest years and efforts to link FP specifically with agriculture and/or NRM dated from at least the 1970s [3]. Like numerous other integrated efforts inventoried, World Neighbors supported integration without giving it a special name or without high visibility, but rather as a matter of meeting important community needs. This approach characterized -still does- development organizations like World Neighbors, CARE, and Save the Children among others, whose overall mission is relatively broad-based, e.g., Poverty Reduction, Food Security, Quality of Life.

Also in the 1990s, various conservation organizations began to engage more actively in policy-related activities linking population dynamics with the environment, internationally and in the

US. This work was supported through a variety of foundations. Few of organizations, however, supported coordinated PE interventions at the community level. Some that did found FP integration particularly hard due to lack of technical expertise; in other cases, concern about how their intentions would be interpreted, i.e., as interest in population–stabilization rather than as a response to local needs, made them reticent to openly engage. Fifteen+ years later, this unease still exists among some conservation groups although, in the interim, there have been impressive examples of open and successful FP integration as part of community-centered conservation efforts.

One example is the World Wildlife Fund (WWF). In 1985, it launched its first international conservation and development project (ICDP) with the dual objective of conserving biodiversity and improving quality of human life. While initial ICDPs (as early forays into linked conservation and development) were not strongly community-centered, WWF learned from experience. In 1992, with monies from the Summit and S.H. Cowell Foundations and its own matching funds, WWF established a Population [Dynamics and Resource] Initiative [3]. Its goal was better understanding of the relationship between population dynamics and conservation.³ Over time, the importance of women’s involvement in their NRM activities became clearly evident. As a result, increasing women’s NRM involvement through improved socio-economic status became a key WWF development strategy [4]. As RH/FP is closely linked to women’s empowerment, both strategies fell under their Population Initiative.

Towards the end of the 1990s, many of these same US-based organizations formed the Community Conservation Coalition (CCC).⁴ Initial support was provided through USAID’s WIDTECH (Women in Development) Project. Sharing the belief that conservation is a social issue, the group’s goal was to 1) explore the relationships between population, environment, and development, which they saw as inextricably linked, and 2) promote the involvement of local communities in conservation projects.⁵ They promoted a “community conservation” approach that both recognized the gender perspectives of NRM and emphasized participatory community engagement [4]. The group took on the challenge of advancing some of the key principles and activities defined at the above two major international conferences, an important next step. The fact that population and health organizations were part of the Coalition meant it filled a unique niche. That general development organizations were involved but not active members over time was considered an important limitation [5]. After WIDTECH funding, a Michigan PE fellow took on the role of helping coordinate Coalition activities until other funding sources were secured.

Shortly prior to this, in 1999, a Michigan Fellow worked with the Packard Foundation to help develop its PE Initiative that operated between 1999-2004.⁶ The Initiative emphasized community level projects integrating conservation and FP interventions in select geographic

³ For WWF in particular, the P in PHE has always meant more than natural population growth and the provision of FP/RH services. The Initiative involved population mapping and an analysis of various demographic dimensions including migration that plays an important role in numerous WWF locales [4].

⁴ Longstanding members included: Conservation International (CI), Jane Goodall Institute (JGI), John Snow Inc (JSI), PAI, Population Reference Bureau (PRB), The Nature Conservancy (TNC), WWF and USAID.

⁵ Its specific mission was to contribute to the conservation of biological diversity by fostering communication, collaboration, and institutional change within member organizations and their partners concerning the linkages among conservation, population dynamics, health, education, and the economy [4].

⁶ To allow for completion, a few of the grants extended through 2006 [6].

areas of high biodiversity, high fertility and poor development indicators. The Foundation also supported leadership development and increased advocacy for PE linkages. Its PHE funding went to 29 organizations to undertake activities under three subprograms: Field Projects; Leadership and Capacity Building; and Advocacy and Consumption. The objective of the former was to: improve the quality of life in focal areas by improving RH, NRM and options for alternative economic livelihoods. Eleven field projects, all in biodiversity “hot spot” areas, were carried out in 5 countries (Philippines, Tanzania, Madagascar, Mexico and Kenya). The largest amount of funding went to the Philippines and secondly to Madagascar - both of which have since served as model sites for P(H)E learning and advocacy. Interestingly, in both countries, food security and livelihood security were overarching themes although in the Philippines the project was conceived and implemented as a PE effort whereas in Madagascar, the approach was PHE (population, health and environment) [6].⁷

Leadership Fellowship funding went to 4 grantees,⁸ all of which played, some continuing, an important role in extending the network of P(H)E practitioners and/or advocates globally. For example, the Beahrs ELP continues to include a workshop on PE connections in its annual summer certificate course. While the PE Fellows Program is no longer run by the University of Michigan,⁹ the fellowship still exists and many organizations that hosted fellows continue to support PHE – the fellows’ imprint. PE fellow placement in the Philippines and Madagascar was instrumental in helping firmly establish P(H)E model programs in those two countries. Packard Foundation- funded Ashoka fellows do not seem to be visibly active in PE but at least one fellow is an active PHE champion, i.e., the founder of Conservation through Public Health (CTPH) and a 2nd Generation USAID PHE grant awardee (see below). Leadership funding to URI/CRC was to further understanding among project beneficiaries about the linkages between population, resource management and gender. This theme was explicitly highlighted early on by conservation groups involved in PHE and is resurfacing more widely as a key PHE theme. URI/CRC has remained an active PHE player and is currently the lead organization on USAID’s 5-year BALANCED (Building Actors and Leaders for Advancing Community Excellence in Development) Project.

Through its Advocacy/Consumption subprogram, the Packard Foundation funded activities in 3 areas including behavior change communication and community education. The Population Reference Bureau (PRB) –a strong PHE advocacy and networking organization to this day – was among the 14 grantees. Its PHE information sharing activities with decision-makers in the Philippines strongly contributed to the genesis of an effective Filipino PHE advocacy movement – SIGUE – that has hosted multiple PHE conferences and other advocacy events over the years. PAI, another grantee under this subprogram, very actively advocated about the value of PHE integration on numerous fronts, through its publications, by convening partners, via informational visits to the “hill” and by means of study tours among other strategies. The 2005 evaluation of the Packard Foundation’s PE portfolio included important lessons learned from all the above activities and potential future directions [6].

⁷ The latter reflected the strong sentiment among implementing partners that in poor rural areas, it is difficult to approach and engage communities in PE actions without first addressing their basic health and nutrition needs. There is good logic to this position although it also points to the importance of understanding and being able to effectively explain the health benefits of FP that, for FP/RH organizations, is a basic tenet.

⁸ UC Berkeley’s Beahrs Environment Leadership Program (ELP), University of Rhode Island’s/ Coastal Resource Center (URI/CRC), the University of Michigan’s PE Fellows Program and Ashoka.

⁹ Currently, it operates through the Oakland California-based Public Health Institute (PHI).

Another key supporter of pioneer PHE efforts was USAID. USAID's Bureau of Global Health PRH Office first began supporting PE initiatives in 1993 in partnership with the University of Michigan's PE Fellows Program.¹⁰ The purpose of the fellowship was to develop a cadre of professionals specializing in PE issues and, through internal postings, to help organizations effectively integrate the two domains. As noted, the CCC and Packard Foundation are among the various organizations that have benefitted from PE fellows.

In the early 2000s, USAID supported cross-sectoral collaboration as part of its Environmental Health Project, Environment Change and Health Outcomes (EHP/ECHO) Program, funded by the Health Bureau's Infectious Diseases and Nutrition Office (HIDN). An important activity was assisting non-governmental organizations (NGOs) and other groups to implement field projects combining NRM and interventions to improve health. To that end, EHP implemented a 4-year, water-focused initiative in Madagascar that linked various projects involved in health, population, and/or environmental conservation. Support was also provided to i) establish Voahary Salama as a local consortium through which integrated activities could be better coordinated and ii) implement an operations research (OR) study involving consortium members. The study aimed to test the hypothesis that integrating NRM with population and health would make projects more effective and sustainable [7]. Providing evidence to support this hypothesis was considered critical to sustaining future support for PHE. To that end, OR studies were also undertaken in the Philippines (IPOPCORM) and in Nepal. The Philippines study in particular yielded some convincing evidence about outcome achievement in multiple domains and continues to be cited as the key source for quantitative evidence in support of this hypothesis [8,9].

USAID support to PE integration gained momentum in 2002 when a dedicated program within the Global Health PRH Office was initiated in response to legislative language included in the FY02 Foreign Operations Appropriations bill. This very important point in the history of PHE funding resulted, in part, from Packard's support to PAI to educate Congressional staff on PE issues [10]. The bill stated that funds allocated under USAID's Child Survival and Health Program Fund for FP/RH should be used "*in areas where population growth threatens biodiversity or endangered species*" [10]. This and similar language was included in Appropriations-related reports in successive years, encouraging USAID to i) promote cross-sectoral collaboration and ii) scale up prior PHE investments in communities around biodiversity-rich areas. PRH Office funding for PHE between 2003-2008 fell under three distinct areas: Field Projects, Technical Leadership, and Support to USAID Missions and CAs [10].

Initial Field Project monies went to the Philippines to ensure continuation of important Packard-funded PE efforts (e.g., IPOPCORM, PESCODEV and the PHE network). It also went to a number of conservation organizations already engaged in and committed to community conservation, either active in the CCC (e.g., CI and WWF) or previously funded by Packard (JGI). Technical Leadership funds went to organizations like PRB to support the SIGUE network in the Philippines and to the Woodrow Wilson Center/Environment Change and Security Project (WWC/ECSP) that had been receiving USAID monies since 1996 (via Michigan

¹⁰ This was an extension of the Michigan University Population Fellows Program which was started in 1984 to provide technical assistance to USAID and developing country organizations just in the area of FP/RH planning [6].

Fellows Program funding) to promote dialogue and disseminate objective PHE information among policy and program audiences [11].

Phase 2: Next Generation Initiatives

Herein, this time period covers PHE efforts initiated after, or continuing from, Packard-funded projects up to 2008. The vast majority of known P(H)E efforts during this time period were funded by USAID through their core PRH or Global Leadership Priority funds.¹¹ Other integrated efforts were inevitably ongoing but if they don't use the PHE title, it can be difficult to identify them. Continued investment by USAID in two countries benefitting from Packard funding, Madagascar and the Philippines, helped take PHE integration to new levels, demonstrating the potential for impact and increased scale, given local conditions, adequate time and resources.

Specifically, initiatives undertaken by CI and WWF in Madagascar continued in the context of the USAID mission's "ecoregional" landscape-level approach. Under the latter, the majority of mission activities under its four strategic objectives (Governance, Health/Population/ Nutrition, Environment/Rural Development and Economic Growth) were focused in three geographic areas of the country (priority ecological landscapes) to maximize the potential for impact. All activities as well as some Food for Peace (food security) efforts were organized under an integrated framework -Nature, Health, Wealth and Power (NHWP)- that drew heavily upon PHE tools, PHE capacity of local NGOs, and PHE lessons learned including from the Packard-funded Madagascar Green Healthy Communities (MGHC) project (2001-2005). Family planning was a key NHWP health component.

The new USAID mission health bilateral, SanteNet, took the lead in bringing together partners, NGOs and government, to jointly plan, implement and document achievements in all NHWP areas. MGHC's tested "champion community" approach was scaled to the next level, communes, via the NHWP initiative and, in some locales, to champion districts. Ecoregional alliances in which all USAID mission partners participated, provided a critical platform for continuous learning, adaptation and advocacy regarding cross-sectoral integration. The NHWP approach, and its integrated PHE roots, lent itself well to the President's "Durban Vision"¹² and "Madagascar Naturally" campaign for economic development that acknowledged and drew upon the country's natural wealth and richness of its people. A third USAID PHE project was awarded to Wildlife Conservation Society (WCS)/Madagascar, a conservation actor actively operating in the north (an area with much of the country's remaining biodiversity) as they were also interested in integrating FP and other health interventions into their local development efforts. This was organized in partnership with two important international health/FP partners, Population Services International (PSI) and CARE.

To extend FP access to even more remote communities than possible under SanteNet, the mission's HPN office developed another funding mechanism, the "Last Mile" which provided grants to CARE in other communities and to JSI/Madagascar to continue its integrated work in

¹¹ A complete description of USAID's support during this time period is provided in a 2007 USAID PHE evaluation report [10].

¹² The Durban Vision, announced in 2003 at the World Parks Congress in Durban, South Africa, outlined the President's commitment to triple Madagascar's protected area in 5 years, from 3% to 10% of the nation's surface area [12].

previously-funded MGCH communities. Small funding also went to Voahary Salama to help maintain prior investment as a forum for cross-sectoral dialogue and to promote PHE approaches and tools.

In the Philippines, PATH Foundation Philippines, Inc (PFPI)'s IPOPCORM project received overlapping and then new funding from USAID. PHE efforts were expanded to new areas and they continued to successfully document the effects and value-added of integration. Until 2008, with Packard Foundation funding, PRB also continued with their advocacy and networking assistant to SIGUE¹³ to help institutionalize PHE as part of local planning where, under decentralized budgeting, the value of an integrated approach particularly resonates.¹⁴

Other countries in which 2nd Generation PHE field projects were undertaken with USAID support include Cambodia, Kenya, Democratic Republic of the Congo (DRC), Uganda and Nepal. All were implemented by environmental NGOs to test the viability of providing integrated services in very remote, biodiversity-endangered, regions. In Kenya, for example, WWF introduced a PHE approach as part of its marine conservation work in the Kiunga Marine National Reserve on the far northern coast near the Somalia border [10]. Among others, they partnered there with Family Health International (FHI)¹⁵ to provide technical support through their USAID APHIA award.¹⁶ This partnership was one among many that has demonstrated PHE practitioners' ability to leverage funds in support of PHE interventions from USAID country offices and others sources. Another example is WWF's Global Development Alliance partnership (WWF, USAID, Johnson and Johnson) that lent support to a number of WWF's site-based PHE projects between 2003-2008, complementing their USAID/PRH Office funding [13]. Another example of a private/public PHE partnership was the SPREAD Project (Sustaining Partnerships to enhance Rural Enterprise and Agribusiness Development), a cooperative Agreement with Texas A&M University and USAID in Rwanda between 2006-2011. Yet another example is USAID's "Flexible Funds", designed to reach underserved populations with FP, that have been used for various PHE efforts.¹⁷

In the DRC, JGI partnered with EngenderHealth, one of its RH/FP partners in Kigoma, to support increasing rural access to RH/FP services. That effort was part of USAID's regional CARPE (Congo Basin) program. There, JGI drew upon its many years' experience in Tanzania with its community-centered project TACARE for which the Packard Foundation provided FP funding in the late 1990s [14]. TACARE has long provided complementary agroforestry, water, tree nursery, FP/HIV/AIDS/health and community development activities around the Gombe National Park, home of three chimpanzee communities studied since the 1960s by Jane Goodall and her team [15]. An important strategy employed by TACARE, learned through project experience as a way to gain community trust, was to first work on something tangible – a school roof or clinic door – as “seeing is believing.” Subsequently, they added interventions as the community deemed them important and for which JGI had resources. In this regard, their approach reflected the philosophy of early development organization projects described in PAI's

¹³ SIGUE, meaning to “keep going” in Spanish, is now called the PHE Network.

¹⁴ Between 2003 – 2010, PRB's PHE activities were supported as part of their USAID BRIDGE Project (BRinging Information to Decisionmakers for Global Effectiveness), another example of leveraging from alternative USAID funding sources.

¹⁵ Now FHI 360

¹⁶ AIDS, Population, and Health Integrated Assistance Program (APHIA) Projects

¹⁷ For example, “flex funds” were used in Madagascar to provide Voahary Salama with institutional support and as grants to some of its members.

inventory [2]. As, around that time, in keeping with new conservation thinking, JGI modified their overall Tanzania strategy to the landscape-level (Greater Gombe Ecosystem).¹⁸

USAID funding during this phase to two countries, Uganda and Nepal, was designed to test special PHE situations: in Nepal, as a means of helping address conflict resolution and, in Uganda, linked to conservation medicine [10].¹⁹ In Nepal, with USAID country contributions, three organizations including WWF worked collaboratively to integrate FP/RH with other Community Forest User Group activities [16]. In Uganda, FP was integrated with actions to reduce infectious disease transmission between humans and Bwindi Impenetrable National Park mountain gorillas [17]. Both country projects benefited from start up assistance and continuous mentorship by international PHE consultants, supported through yet a separate USAID funding mechanism [10].

Towards the latter part of Phase 2, USAID shifted its focus from funding on-the-ground PHE projects to funding more capacity building, policy development and research-related efforts. This was a strategic decision to create the potential for more broad-based change through political and organizational transformation [18]. Funding was provided to develop instructional and project support tools,²⁰ WWF undertook a learning exercise to analyze the value-added of PHE,²¹ and the WWC/ESCP continued to provide an objective forum for presenting new research and debating policy options on PHE connections and demographic security in developing countries.

Phase 3: PHE's Current Face

In 2008, USAID/PRH Office further revised its PHE funding approach, awarding a comprehensive 5-year project (BALANCED) with three main objectives: capacity building, knowledge management and implementation support for projects funded through country mission funding. BALANCED has conducted multiple trainings over the past four years in the Philippines and Africa using integrated training curricula and behavior change tools that it has developed and/or refined. Trainings have involved participants from many countries, thereby expanding the (potential) pool of PHE practitioners [20]. The project has also developed a web-based PHE toolkit as a reference source [21] and has been invited to help a number of USAID missions integrate across their programs e.g., USAID/Tanzania focusing on HIV/AIDs prevention as the health intervention near Saadani National Park and USAID/Philippines combining FP and conservation under their Health and Energy and Climate programs, respectively.

Capitalizing on lessons learned from the IPOPCORM Project, between 2008-2010, PFPI launched its Poverty-Population-Environment Project with Packard Foundation support to continue to advance RH/FP in 3 bioregions within a NRM and poverty alleviation context [21]. In addition, its Alternative Advocacy Project worked with Filipino policymakers to mainstream RH/FP as a good coastal resources management strategy and as a means to promote food security. The UN Population Fund (UNFPA) provided PFPI also provided support for its Expanded IPOPCORM Project. These efforts are all helping to strengthen Philippines as a model

¹⁸ Since then the focus is on the Gombe-Masito-Ugalla Ecosystem [15].

¹⁹ Later, in this country context considered the One Health approach.

²⁰ Through the University of North Carolina MEASURE/Evaluation Project [19].

²¹ Partially funded via their public-private partnership with Johnson and Johnson.

for sustaining and scaling PHE integration with demonstrable results.²²

In Madagascar, new USAID PHE efforts were provided in 2008 through USAID Flexible Funds and Water, Sanitation and Hygiene (WASH) monies, including to a new marine conservation PHE partner operating on the southwest coast, Blue Ventures. Unfortunately, funding had to be prematurely curtailed in 2009 due to the country's political situation. However, Blue Ventures continued its PHE efforts through other funding sources including UNFPA and its organized volunteer conservation research program [23]. Since Blue Ventures was first established in 2003, it has made impressive strides in developing and expanding its community development work, more recently incorporating FP and other health interventions to the point that it is now considered a model PHE project.²³ Its UK-based medical director has very strategically and successfully identified multiple funding opportunities for its community-based efforts including from European aid organizations such as UK's Department for International Development (DFID). Other organizations have also successfully obtained European aid funding to continue or initiate their PHE efforts (e.g., Swiss Development Agency funding to WWF in the DRC;²⁴ Finnish funding in Nepal; and Danish funding to IUCN in Kenya,²⁵ among others.

To achieve more critical mass and opportunities for sharing learned in Africa, in 2007, PRB launched an Africa Regional PHE Network that has since spawned a number of country PHE working groups that also receive some PRB support. The Network was launched at the culmination of the PHE Regional Conference in Ethiopia, co-funded by USAID and the Packard Foundation and hosted by LEM, the Environment and Development Association of Ethiopia. One of the most active and successful of the PHE working groups is in Ethiopia. Over the past five years, it has grown to over 40 members and it has its own website; it has also evolved into its own legal entity: Ethiopia PHE Consortium [25]. The consortium's activities have been featured as part of the Wilson Center's ongoing PHE forums and they are benefitting from a PHE Fellow who is focusing on strengthening consortium partner monitoring and evaluation (M&E) activities, including harder-to-measure "value added" indicators [26].

After its USAID/PRH Office funding for PHE ended, CTPH in Uganda secured a sub-award to continue activities under the USAID mission's new environment bilateral project (Wild West/WCS), with contributions from both the mission's Health and Environment/Economic Growth offices. The funds were intended, respectively, as a means of extending access to FP in rural areas and improving conservation by reducing risks to mountain gorillas and livelihoods (as many local residents are engaged in gorilla ecotourism). Subsequently, through a UK Whitley Gold award, CTPH was able to support water and sanitation activities, another potentially important means of disease transmission between humans, their livestock and gorillas. Their PHE program continues despite limited funding as the volunteers are very committed. The two volunteer groups proactively solicited funding for group livestock that now earn the group monies, offsetting volunteer time spent on PHE. This innovative strategy of minimizing volunteer turnover introduced the added benefit of opportunities for positive role modeling by the male and female volunteers, working together on a common income-generating project, their own [27]. CTPH also received M&E and advocacy support from FHI 360 through its USAID-

²² The latest Philippines Commission on Population report focuses specifically PHE as a model for national development [24].

²³ It receives support for its FP efforts from both Marie Stopes International and PSI Madagascar offices [23].

²⁴ This funding helps continue efforts supported through WWF's 2008-2011 PHE Alliance with Johnson and Johnson.

²⁵ Unfortunately, this project did not get implemented due to a number of challenges including security issues in the north.

funded PROGRESS (Program Research for Strengthening Services) project. Kenya's Green Belt Movement (GBM), founded in 1977 by Nobel Peace Prize winner Wangari Maathai, also received PROGRESS support to integrate FP into its tree-planting and community empowerment projects [28].

A relatively recent PHE project, Health of People and the Environment-Lake Victoria Basin (HoPE-LVB) led by Pathfinder International in Kenya and Uganda, receives implementation funding from the MacArthur and Packard Foundations and M&E monies from USAID/PRH. HoPE-LVB is unique in a number of ways including its focus on scale from the start, through project support from ExpandNet, and a collaborative partnership with USAID's REDSO Office supporting the Lake Victoria Basin Commission to help scale HoPE's PHE model basin-wide. The project is catalyzing community-wide behavior change towards positive health, livelihood and conservation practices through use of model households and champions, focusing on women and youth as key change agents [29]. Pathfinder International is also working in Tanzania on the shores of Lake Tanganyika on a second PHE project, Tuungane, in collaboration with The Nature Conservancy (TNC) and Frankfurt Zoological Society two new PHE implementing partners [30, 31].

There are other integrated efforts being initiated but in the absence of a special effort to identify them, it is difficult to keep track. It is certain, however, that a growing number of organizations, countries and projects are applying PHE principles and/or specifically employing a PHE approach. PAI's inventory of projects served this purpose in the late 1990s. PRB has recently tackled the same challenge by inventorying and mapping current and recent efforts in developing countries that can be considered PHE.²⁶ The 87 projects highlighted in their PHE Project Map are or were recently actively addressing a component of population and RH in combination with environmental efforts [32].²⁷ Additionally, the US-based Coalition from early years continues to convene as a larger PHE Policy and Practice Group, providing an important platform for shared learning and advocacy. All this point to a successful PHE history and positive potential for continued PHE integration in the future. Having recently celebrated Rio20+ and approaching 20 years since the International Conference on Population and Development, there is now experience and a tested formula for cross-sectoral collaboration and integration of population and environmental actions towards more sustainable development, the call for action that emanated from these two important international conferences.

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²⁶ PRB has supported its PHE funds efforts since 2010 through the organization's USAID IDEA Project.

²⁷ Projects that ended before 2005, many described in the preceding pages, are not included in the current PRB map.

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