

ORIGINAL RESEARCH ARTICLE

Addressing Family Planning Access Barriers Using an Integrated Population Health Environment Approach in Rural Uganda

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Abstract

Recent studies recommend FP initiatives in rural sub-Saharan Africa operate in more context-specific ways to reduce inequities. In 2011 such a project, HoPE-LVB, was implemented by Pathfinder International and local partners among Ugandan Lake Victoria fishing communities using a Population, Health and Environment approach. Among other objectives, the project aimed to increase support for FP and women's involvement in decision-making by linking FP benefits to community needs including income generation from nature-based livelihoods. Improved FP access was measured by the project using qualitative methods and the project's indicator database in terms of five barriers: service quality, community knowledge, physical access, finances, and social acceptability. Through coordinated interventions representing multiple sectors, the project helped communities move more towards a "tipping point" whereby FP use has now become more an acceptable and accepted social norm. Central to this has been improving service quality and physical access as well as facilitating women's involvement in income-generation, thereby increasing their agency and contribution to decision-making including pregnancy timing. (*Afr J Reprod Health* 2018; 22[3]: 100-110).

Keywords: FP access barriers; PHE integrated approach; rural Uganda

Résumé

Des études récentes recommandent que les initiatives de la PF en Afrique subsaharienne rurale opèrent de manière plus spécifique au contexte pour réduire les inégalités. En 2011, un tel projet, HoPE-LVB, a été mis en œuvre par Pathfinder International et des partenaires locaux parmi les communautés de pêcheurs ougandaises du lac Victoria en utilisant une approche axée sur la population, la santé et l'environnement. Entre autres objectifs, le projet visait à accroître le soutien à la participation de la PF et des femmes à la prise de décision en liant les avantages de la PF aux besoins de la communauté, y compris la génération de revenus provenant de moyens de subsistance basés sur la nature. L'amélioration de l'accès à la PF a été mesurée par le projet à l'aide de méthodes qualitatives et de la base de données d'indicateurs du projet en termes de cinq obstacles: qualité de service, connaissances communautaires, accès physique, finances et acceptabilité sociale. Grâce à des interventions coordonnées représentant plusieurs secteurs, le projet a aidé les communautés à évoluer vers un point de basculement où l'utilisation de la PF est devenue une norme sociale plus acceptable et acceptée. Ceci a joué un grand rôle dans l'amélioration de la qualité des services et de l'accès physique ainsi bien que de rendre facile l'engagement des femmes dans la génération de revenus, augmentant en conséquence leur agence et leur contribution à la prise de décision, y compris le moment de la grossesse. (*Afr J Reprod Health* 2018; 22[3]:100-110).

Mots-clés: Obstacles à l'accès à la PF; Approche intégrée PHE; Ouganda rural

Introduction

There is a growing body of research on rural populations in sub-Saharan Africa (SSA) focusing

on non-use of family planning (FP) and disparities in FP access¹⁻³. Several studies note that little evidence/few examples exist of field implementation to successfully address barriers to

FP access specific to rural areas. A suggested way to reduce disparities and barriers is for rural projects to operate in more “context-specific” ways.

Below we describe such a project, implemented in Lake Victoria island communities in rural Uganda. Among other objectives, the project aims to improve FP access while simultaneously addressing livelihood security challenges associated with local environmental degradation as interconnected and interdependent needs. In order to effect such changes, the project believes that community interventions need to be undertaken in an integrated manner- the project’s theory of change.

To this end, the project employs an integrated Population, Health and Environment (PHE) approach that considers how human health and the health of the local environment are inextricably linked within the local context. Such framing enables communities to appreciate the importance of FP and other health issues in a broader context, linked closely to the challenges of their daily lives.

Project area

Lake Victoria is the largest lake in Africa and the third largest fresh water lake in area in the world. It is one of three “African Great Lakes” situated around the Albertine Rift of East Africa. These lakes are known for their many species of endemic cichlid fishes. Importantly, Lake Victoria supports the fishing and farming livelihoods of many communities bordering the lake in five basin countries (Kenya, Uganda, Tanzania, Rwanda and Burundi). Reduced livelihood and food security results from over and illegal fishing, climate variability, plant disease and local deforestation, among other factors⁴. Additionally, many communities, especially lake island villages, are quite remote and lack good access to basic services including FP.

In 2011, the John D. and Catherine T. MacArthur Foundation launched a multi-year grant program to address lake biodiversity loss while sustaining the benefits that humans in the

area derive from the local natural environment (i.e., ecosystem services). Its conservation and health programs joined forces with the David and Lucile Packard Foundation and USAID’s Office of Population and Reproductive Health to fund a PHE effort in the LVB. The effort was designed to improve the community’s health - including maternal and child and women’s sexual and reproductive health (SRH) - while simultaneously reducing threats to the local natural resources and ecosystems upon which local communities depend for their livelihood⁵. The joint funding facilitated field implementation and an opportunity to explore how barriers to FP access could be addressed in context-specific ways in select rural areas in the LVB, thereby addressing field experience gaps highlighted in recent studies noted above. Experiences from Uganda as a LVB country are relevant to share as fertility rates and the desired number of children has been documented to be higher in its rural areas⁶ and opposition to FP is considered to be a barrier, including in lake fishing villages⁷.

Late 2011, a team of local partners led by Pathfinder International began implementation of a six-year project named Health of the People and Environment-Lake Victoria Basin (HoPE-LVB, hereafter HoPE), initially rolled out in two phases (currently continuing as Phase III). Project communities are located in select areas of the two districts of Wakiso and Mayuge. In Phase I, the target population was mainly the catchment area of four parishes in two sub-counties, estimated at approximately 15,000 people. In Phase II, starting in 2014 with project scale up, the target area increased to the sub-county level. This increased the target population size to over 50,000.

Communities were invited to participate based on health indicators, local conservation status, community livelihood needs and the presence of on- the-ground partners as well as financial and logistical considerations. Targeted areas were lake islands with fishing settlements that have been traditionally neglected and underserved for various reasons. Farming is the key livelihood activity in these communities,

mainly subsistence but also for cash crops. Fishing is a complementary source of food and income for a subset of community members.

At project start, HoPE identified several “measures of success” including increased access to FP. This was operationally defined according to five barriers: i) service quality, ii) adequate community knowledge, iii) financial access, iv) physical access and v) social acceptability. This review describes how HoPE applied context-specific strategies to address these five FP access barriers using an integrated PHE approach.

Initial Status: Rationale for project interventions

The project conducted a needs assessment early in year one comprised of multiple components including a population-based household (HH) survey, a facility survey and a participatory rural appraisal including focus groups (FG). The assessment documented the status of various health (including women’s SRH), livelihood and conservation-related factors in targeted areas and provided a basis for proposing project interventions. (A detailed description of all assessment methods and synthesis of key assessment results are available on Pathfinder International’s project website)⁸.

Interestingly, contraceptive use at project start among HH survey respondents was relatively high (50.2% any method; 40.2% modern methods). Some did not use FP due to stated lack of need (e.g., not sexually active, menopausal, post-partum amenorrhea). However, among the subgroup considered “in need”, unmet need was substantial - 48.2%. Many factors contributed to this including a lack of women’s involvement in decisions to manage the timing of their pregnancies and family size. Addressing women’s involvement in decision-making thus became a focal area for project interventions.

Service quality

According to the facility survey, service quality was a FP access barrier in project communities. FP services were provided in all facilities but none

were considered adequate. This partly reflected the lack of in-service FP training for providers. Many providers were unfamiliar with long-acting reversible contraceptives (LARCs) or how to manage injectable side effects. Stock outs were problematic everywhere and youth friendly services (YFS) were not available anywhere. Female FG participants shared that health provider attitudes were also a quality barrier to women seeking services. Others expressed reticence to use their valuable time or limited money to access public facilities that could not guarantee a “positive return on their investment” (i.e., associated with visiting the facility).

Adequate community knowledge

The HH survey revealed high contraceptive knowledge including of LARCs (e.g., 84% for IUDs; 78% for implants). However, clinic staff felt that community members lacked *adequate* knowledge, especially for some long-term methods. The main reason for non-use among those “in need” was fear of side effects, potentially due to misinformation. Almost all (90%) respondents knew where to obtain FP services; 50% mentioned the health center (HC) and 44% mentioned a private clinic or hospital. However, very few (<1%) mentioned a community-based distributor or clinic outreach.

Physical access

During initial scoping, the team continuously heard how community members felt “abandoned” as they rarely received visitors, particularly government or NGO representatives. FG respondents listed distance as a key access barrier. Added to this, commodities were sometimes not available after traveling long distances. Village health teams (VHTs) - usually two workers/village - existed at project start but only provided FP information, condoms and pills.

Finances

FG respondents specifically mentioned cost as a deterrent to facility use. While some women used

a private clinic due to quality issues, others used facilities, even if distant, because services were free. Others didn't access services at all as they couldn't afford transportation or private services. This reflects how some women lacked or had limited money of their own, an important barrier in this rural context.

Social acceptability

Various FG women shared that “contraception is appropriate only for those who have achieved their desired family size.” Additionally, although many FG men mentioned the economic burden to them of a large family size, they did not feel responsible for FP-related decisions; they considered childbearing and rearing mainly “women's responsibilities.” Others corroborated that some husbands were not willing to provide their spouse the funds needed to access a clinic, especially if for FP-related reasons.

Methods

This paper describes how project interventions were organized to address select FP access themes. A qualitative, process evaluation conducted in 2014 and end-of-Phase II internal and external evaluations in 2017 provided a basis for assessing progress towards the project's long-term objectives¹⁰⁻¹². Evaluation methods for all included FGs, key informant interviews, interviews with MHHs and a review of project monitoring data. Select findings from these three sources on how FP access has improved through reductions to the five barriers are provided in Results below. Evaluation method and monitoring details are available in Pathfinder International's HoPE-LVB Toolkit¹³.

Project description: How access barriers were addressed via an integrated PHE approach

General project principles

While an individual's right to FP and other SRH services strongly informed project design, HoPE

also considered and programmed for different ways in which the *community* makes decisions. For example, early on, the team met with community leaders to gain their trust and help them understand how HoPE would be operating in more integrated ways (supporting sectoral interventions but also co-locating interventions representing multiple sectors to better represent the context of community members' lives). HoPE increased receptivity to new or unfamiliar ideas including FP by gaining community trust, committing support for many years, emphasizing listening and targeting interrelated issues of specific concern to the community. The project proposed interventions of interest to many community groups/subpopulations to be inclusive, maximize community involvement and give voice to marginalized subgroups. In this regard, HoPE represented a “whole community” initiative. Additionally, working with existing “resource groups” (women's groups, youth groups/young mothers' groups, farmers, fishers, VHTs and community leaders) was a means of sustaining efforts after project funding ended.

Interventions to improve FP access

The project provided support to “best practices” in FP as well as to several innovative interventions to improve FP access⁹, described below. In addition, characteristic of an integrated PHE effort, HoPE supported interventions in other sectors (e.g., conservation, economic development), *many of which simultaneously helped reduce one or more of the identified FP barriers*. For example, the project supported Beach Management Units (BMUs), a government entity, to improve fisheries-related livelihoods and food security from lake fish. To increase FP access, the same resource group was targeted for FP educational events (See Pathfinder International's HoPE-LVB toolkit for details on all project activities)¹⁰.

Service quality

Interventions addressing this barrier were mainly uni-sectoral, representing many FP “best

practices". Non-use of methods due to fear of side effects suggested a need for improved messaging. Technical training was thus provided for clinic staff including in LARCs and how to provide quality services. VHTs also received technical training in methods they could provide as well as how to effectively refer. Improvements were made to local facilities, clinics added health talks and FP was linked where possible to other health services (e.g., immunization and antenatal care). HoPE also advocated for needed system-strengthening actions. Facility management committees were trained on health sector services, managing funds and joint supervision. Considerable attention was given to strengthening YFS including how to appropriately speak to and counsel youth interested in FP. Importantly, HoPE helped communities advocate themselves for improved services - an important step towards sustaining momentum post-project.

Adequate community knowledge

This barrier was addressed via both uni-sectoral and cross-sectoral education and awareness-raising activities. The project supported community dialogues and multiple means of messaging. Importantly, messages were customized to increase relevance to the social, economic, political and environmental context of participating communities. The project encouraged cross-domain/multi-purpose workers and provided cross-sectoral training to all resource groups, as well as training in the principles of PHE. This helped build a stronger "sense of community" through collective understanding of interrelated factors and ways to simultaneously address these factors, including through use of FP. Notably, as community members engaged in farming, and some in fishing, the project explained the interdependency between their livelihood and the "health" of the lake, local tree cover and soil fertility. The benefits of FP and other health interventions were strategically introduced within this context. This was a key, innovative way that HoPE helped to improve FP knowledge (and

acceptability) among community members, contextualized to the realities of their daily lives.

Physical access

PHE projects are often implemented in remote areas of biodiversity conservation value that have been "left behind" in terms of health service access. By partnering with organizations representing other sectors to simultaneously address multiple community needs in remote, Lake Island communities, HoPE increased physical access to much needed health services including FP.

Within communities, the project increased physical access by supporting campfires in the evening, organized around men's work schedules. As mentioned, topics discussed were of interest to men, e.g., fishing and farming and the importance of FP was integrated into this context. This convenient evening event, in a forum more comfortable to men as it included topics of their interest, helped encourage more men to attend. This in turn increased men's exposure to information on FP.

Additionally, public clinics organized outreaches specifically encouraging men to attend, alone or with their spouse. For example, the Fisheries Department was invited to give talks during some outreaches about topics of interest to fishers. At the same time, men were encouraged to seek available outreach services and areas were set up specifically for them. Like campfires, this integrated strategy aimed to increase men's knowledge and alter the perception - related to social acceptability - that health services fell only within a "woman's domain." The message that spouses should support each other in terms of accessing health services, including women's SRH services, was reinforced through this and many other project interventions.

HoPE partnered with a private, faith-based facility in one parish to extend its reach. The project also invited NGOs to provide long-term method outreach "events" as a means of further expanding geographic access to these methods.

VHTs were trained how to provide injectables, one of the preferred methods among community women. VHT clinic links were strengthened and HoPE provided VHTs with T-shirts and bicycles to help improve their credibility. Some VHTs also participated in youth group income-generating activities to offset their volunteer time (see below). Collectively, all these interventions helped motivate VHTs to continue delivering FP services to more remote areas, thereby increasing physical access.

BMUs trained in the benefits of FP distributed condoms and were encouraged to talk to other fishers about the importance of contraceptive use and safe sex practices. This helped expand access to condoms among this subpopulation (particularly relevant in this high HIV risk area with migrant fishing populations).

Finances

The project supported various environment-friendly income-generating efforts to improve community crop yields and daily fish catches. This simultaneously increased the ability of farmers and fishers to feed their families. To address finances as a FP access barrier, HoPE also supported small entrepreneurial/income-generating enterprises among community women's groups. This allowed women to have their own source of income for transportation to access health clinics, including for FP services, as well as for other household needs such as school fees.

Youth groups were similarly supported in income-generating enterprises. This addressed a key conservation and livelihood issue, i.e., youth were engaging in illegal fishing practices that were depleting fish stocks to unsustainable levels. To address FP access issues, youth were also encouraged during these interventions to use the newly established YFS at local clinics. The latter message was better received in the context of an income-generating forum that was very relevant to their daily needs. The project also addressed financial issues by promoting a "savings culture" among the youth.

Young mothers received information from the project about raising healthy infants and gaining access to FP. They were also given the opportunity to engage in income-generating activities e.g. making fuel-efficient stoves. Stoves made from local clay reduced the need to cut trees for firewood (an environmentally-destructive practice in that area); it conferred a health benefit for those using the stoves through reduced indoor smoke exposure; and, it made for a more conducive household environment in which families could be together and share household chores: a win-win-win.

Social acceptability

Initial assessment findings pointed to a need to help shift social norms regarding gender roles. They also highlighted a need to positively engage community males more in decisions related to contraceptive use, and couples together in decisions about birth planning and family size. These needs relate to all women but especially to those who may not openly express wanting to stop or delay childbearing as they don't routinely engage in such discussions with their spouses, potentially classified in HH surveys as "not in need" of FP.

Model households (MHHs) including both male and female heads were a key integrated HoPE intervention that helped improve the social acceptability of FP. To be model, a list of specific actions including sharing positive attitudes towards FP had to be part of the household's routine practices. This required displaying FP materials and explaining to household visitors the benefits of birth spacing/FP and contraceptive methods. Community members were invited to observe and learn about the advantages of MHH practices and how to become a MHH themselves. Being a MHH was considered an important achievement, yielding increased standing in the community. This motivated community households to more readily embrace MHH criteria practices. In this regard, it helped increase the social acceptability of FP.

PHE champions were another strategy for addressing the social acceptability of FP. They were respected individuals (e.g., teachers, village officials, nurses and VHTs) and served as model change agents. Champions spoke up at community meetings and met with government officials during project site visits, among other responsibilities. They usually lived in MHHs so practiced the same messages as they promoted via community sensitization and other means.

Results

Illustrative findings indicating progress towards improved FP access

Between project start with clinic support in 2012 through 2016, annual Couple Years of Protection (CYP) in its Uganda sites more than doubled (1855 in 2012 versus 4941 in 2016). Over this time, HoPE contributed to 25,914 Couple Years of Protection (CYP) including all contraceptive types distributed through all channels (in the clinic, during outreaches, by VHTs and by other resource groups). This achievement reflects an expanded method choice available through the different sources – an indicator of service quality – as well as other barrier reductions. Importantly, HoPE successfully advocated for clinics to accept referrals from non-health resource groups like BMUs as well as lay- persons (in addition to VHTs), reflecting the project's integrated and inclusive nature.

The highest proportion of CYP annually was attributable to LARCs. This was particularly the case in the first three years (76%, 60%, and 60%, respectively) when HoPE made a concerted effort to increase service quality by increasing access to long-term methods. LARCs were mainly provided in facilities but they were also distributed during outreaches – a positive project contribution in terms of expanding physical access to these methods, close to communities.

A key role that VHTs played was distributing short-term methods, especially condoms. Also notable was their role in

distributing injectables, once trained in Phase II and officially permitted to do so. Most injectables were provided at the clinic but the number provided by VHTs in Phase II was slightly higher than the number distributed during clinic outreaches (1291 versus 919, respectively).

Resource group FGs and key informant interviews yielded important insights into how integrating across sectors helped reduce FP access barriers, in particular regarding spousal and community (social) acceptability¹⁰⁻¹². For example, some FG women, especially young mothers, shared stories of increased confidence in themselves accompanied by increased self-respect and respect from others, given their income-contributing roles. While income generation helped reduce the finance access barrier, it also helped reduce pressure on husbands who previously were the sole financial supporters in the family. In that regard, some women reported increased respect by their husbands and improved spousal relations including communications about FP/health and other traditionally “female” subjects. In a few cases, this not only improved spousal relations but also reduced domestic abuse. MHH members also proudly shared how they modeled positive behaviors that were influencing practices throughout the community, not just contributing to their own household income and wellbeing.

The following quotes corroborate evaluation findings cited above^{12, 13}.

“Initially, the whole community had rejected FP because of misconceptions. With the knowledge acquired, we are fighting.” (LC Chairperson)

“Before.., we never provided long-term methods ...because we were not trained. When the project came in, they took us for capacity building, so we can now provide these methods.” (Health service provider)

“Men have come to appreciate the role of women in the community and have

encouraged their wives to join and learn from project activities.” (Field officer)

“Women used to not be involved in decision making in a marriage, it was the men’s right. But now there is a lot of change in that they can decide to conceive or not.” (Local political leader)

“FP has been beneficial even within our houses...HoPE has taught that both partners should attend clinic to get trainings on FP. This reduces struggles between partners as we are transparent with one another.” (Farmer’s group member)

“HoPE has taught us to make energy-saving jikos with no smoke. Since I started using it my husband can stay longer in the house because there is no smoke that will drive him away. He can even stay with me longer in the kitchen as he waits for food and keeps me company. Energy-saving jikos have increased love in our families.” (Women’s group member)

“The integrated nature of the project made it easy for us to reach men with information, we could get them in from farms and engage them in issues of sustainable agriculture and thereafter link it to FP. With this we have seen many men softening up to FP.” (MHH member)

‘I used to... rely completely on my husband’s income from the lake- which was never enough for the family. But with HoPE’s teaching, I decided to start using FP and join a group of women to start a tree nursery bed. Our husbands were supportive because HoPE had taught them about fishing and alternative livelihoods.’ (Women’s group member)

“.. (HoPE) incorporated both the males and females... to promote and break the

barriers to FP. This has encouraged full participation because the information is widely shared everywhere in the community.” (MHH member)

“As MHH, we are role models ... our members space our children well at a minimum two years... The project has really enlightened us.” (MHH member)

Discussion

Over its first two phases, HoPE tested and fine-tuned an integrated approach designed to meet multiple community and local needs. It provided opportunities for learning, recognizing the interdependence among health, development and conservation of local natural resources and women’s critical role in them all. By the end of Phase II, consistent with the project’s theory of change, communities were able to demonstrate an understanding of PHE linkages in their communities and why an integrated approach is an effective means of simultaneously addressing these linkages.

The fact that PHE projects, by design, work collaboratively with conservation organizations to have a presence in remote areas supports the position that efforts like HoPE help reduce inequities in physical FP access. Added to this, in remote areas where traditions remain strong, misinformation about FP can be deeply entrenched. To reduce misinformation and increase demand, community members need to be accepting of FP services and understand their benefits - to individuals, to families and to the community at large. Supporting interventions from other sectors that address multiple stated community needs has helped increase the acceptability of all HoPE efforts including FP.

Increased opportunity for income generation reduces financial barriers to FP and other health services where such services are not locally available or otherwise incur costs. As income generation in this project has been purposefully linked to sustainable natural resource management, this has also helped reduce

conservation threats that negatively affect livelihood security. Importantly, this has brought women into community decision-making about and actions in favor of local environmental management – traditionally more the role of community males in this area. By purposefully linking income generation with FP information and method availability, this has helped increase everyone's knowledge about and acceptability of FP – traditionally more the arena of community women in these communities.

Various HoPE efforts were targeted at the community and resource group level so that individuals could benefit from change in community-wide norms and official policies. This aimed to realize shifts in long-standing beliefs, including the acceptability of FP, and to confer longer-term effects. Through coordinated interventions and mutually-reinforcing strategies, the project has been able to move communities more towards a “tipping point” whereby use of FP has now become more of an acceptable and accepted social norm. In this regard, HoPE experiences provide evidence of the additional value to FP when interventions representing other sectors are coupled with FP best practices to better reflect the communities' overall needs and local context.

An important aim of the project was to test HoPE's PHE “model” in select locales, complemented by strong advocacy efforts at multiple levels, as the basis for basin-wide scale-up. To that end, the project incorporated the concept of “beginning with the end in mind”, a strategy developed by WHO/ExpandNet to build sustainability into projects from project start¹⁴. To help achieve success and scale-up, HoPE developed integrated PHE advocacy materials and provided support to encourage and facilitate government officials from multiple sectors to visit these remote communities, often for the first time. These visits provided an opportunity for officials to witness how an integrated approach contributed to both sectoral and interconnected multi-sectoral community needs. It also opened the door and set a precedent for government representatives to

continue to provide much needed support to these communities - an important step towards sustaining momentum post-project. In addition, PHE groups were formed at multiple levels to facilitate cross-sectoral understanding and future planning. Impressively, this included collaboration with the LVB Commission of the East African Community that has developed a member country policy supporting use of the PHE approach including support for FP as a means of achieving their Sustainable Development Goals (SDGs)¹⁵.

Conclusion

To address barriers to FP access in remote areas in rural SSA, recent studies have suggested that projects operate in more “context specific” ways. HoPE has done this by addressing livelihood challenges linked to the use of local natural resources, health issues important to local communities and, critically, women's role in these domains including in family and community decision-making. The benefits of FP have been successfully woven interdependently into all of the above as a part of the local “context.”

While sector-specific best practices and tested interventions are known to work under study conditions, how to coordinate interventions from multiple sectors to be mutually-reinforcing during project implementation is less documented and understood¹⁶. HoPE's use of an integrated PHE approach including increasing FP access helps address this field implementation gap. This underscores the value of telling HoPE's context-specific PHE story about experiences in rural, Ugandan island communities in the LVB.

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Contribution of Authors

Dr. Gaffikin and Ms. Aibe jointly determined the project FP access themes around which the analysis for the paper was designed and which interventions addressed each theme. Both co-authors were involved in designing the project evaluations from which select findings were extracted to highlight progress towards long-term goals and in preparing the manuscript. Both authors approve the manuscript content.

References

- Solanke BL. Factors influencing contraceptive use and non-use among women of advanced reproductive age in Nigeria. *J Health Popul Nutr* 2017;36:1-14.
- Muanda MF, Ndongo GP, Messina LJ and Bertrand JT. Barriers to modern contraceptive use in rural areas in DRC. *Cult Health Sex* 2017;19:1011-1023.
- Kock L and Prost A. Family planning and the Samburu: A quality study exploring the thoughts of men on a population, health and environment programme in rural Kenya. *Int J Environ Res Public Health* 2017;14:528-543.
- Birdlife International. Conservation Strategy for the Great Lakes Region of East and Central Africa. Cambridge: Birdlife International, 2012. 265 pp. http://www.birdlife.org/sites/default/files/attachments/AUTHORISED-GLR-STRATEGY_0.pdf Accessed 6th, January 2018.
- Environmental Health Project. Population, Health and the Environment (PHE) <http://www.ehproject.org/phe/phe.html> Accessed 5th, January 2018.
- Uganda Bureau of Statistics and the DHS Program ICF. Uganda Demographic and Health Survey 2016 Key Indicators Report. Kampala: Government of Uganda, 2016. <https://dhsprogram.com/pubs/pdf/PR80/PR80.pdf> Accessed 6th, January 2018.
- Nanvubya A, Ssempiira J, Mpendo J, Ssetaala A, Nalutaaya A, Wambuzi M, Kitandwe P, Bagaya BS, Welsh S, Asiimwe S, Nielsen L, Makumbi F and Kiwanuka N. Use of Modern Family Planning Methods in Fishing Communities of Lake Victoria, Uganda. *PLoS ONE* 2015;10: e0141531.
- The HoPE LVB Baseline Assessment Team. Health of People & Environment in the Lake Victoria Basin Baseline Study: Synthesis Report. Boston: Pathfinder International; 2013. <http://www.pathfinder.org/publications/hope-lvb-baseline-study> Accessed 3rd, January 2018.
- World Health Organization. A Guide to Identifying and Documenting Best Practices in Family Planning Programmes. Geneva: WHO; 2017. <http://apps.who.int/iris/bitstream/10665/254748/1/9789290233534-eng.pdf?ua=1PI> Accessed 5th, January 2018.
- Lopez-Carr, D, Kibombo R, Ondego D and Asiimwe W. Health of the People and Environment in the Lake Victoria Basin (HOPE-LVB) Project Evaluation: Solutions for Healthy People and a Healthy Planet. Washington DC: USAID, 2017. http://ghpro.dexisonline.com/sites/default/files/350%20HoPE-LVB%20Report%20Final_with%20annexes_4-25-18.pdf Accessed 30th July 2018.
- Applied Research Bureau LTD. Final Midline Report on the Findings of key Informant Interviews and Focus Group Discussions Conducted in HoPE-LVB Project areas in Uganda and Kenya. Boston: Pathfinder International, 2014. 103 pp. <http://www.pathfinder.org/wp-content/uploads/2017/01/HOPE-LVB-MTR-Qualitative-Report-6.28.14.pdf> Accessed 8th, January 2018.
- Pathfinder International. Internal Endline Evaluation Report. Health of People and the Environment Lake Victoria Basin Project. Boston: Pathfinder International, 2017 Accessed 30th July 2018.
- Pathfinder International. HoPE-LVB Toolkit 2017. <http://www.pathfinder.org/publications/hope-lvb-toolkit/> Accessed 9th, January 2018.
- ExpandNet and World Health Organization. Beginning with the End in Mind: Planning Pilot Projects and Other Programmatic Research for Successful Scaling up. Geneva: WHO, 2011. 18 pp. <http://www.expandnet.net/PDFs/ExpandNet-WHO%20-%20Beginning%20with%20the%20end%20in%20mind%20-%202011.pdf> Accessed 5th, January 2018.
- The East African Community. Integrated Population, Health, and Environment (PHE) Strategic Plan (2016-2021). Nairobi: East African Community, 2015. 286 pp. https://www.k4health.org/sites/default/files/phe_eac_strategy_04_march_2016_cleaned_.pdf Accessed 9th, January 2018.

16. Yavinsky RW, Lamere C, Patterson KP and Jason Bremner. The Impact of Population, Health, and Environment Projects: A Synthesis of the Evidence.. Washington: Population Council,

2015. <http://evidenceproject.popcouncil.org/wp-content/uploads/2015/06/PHE-Synthesis-Report1.pdf> Accessed 9th, January 2018.