BUILDING CROSS-SECTOR COLLABORATION TO IMPROVE COMMUNITY HEALTH

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ABSTRACT

Urban slums present complex challenges. In 2015, the Old Fadama slum of Accra, Ghana, was home to over 100,000 people and had virtually no water or sanitation infrastructure, contributing to diminished quality of health and frequent cholera outbreaks. Beginning with three stakeholders, participatory action researchers (PAR) introduced the cross-sector collaboration evidence base and used interviews, focus groups, and a community survey to create priorities, strategies, and a latrine installation project. Latrine installation resulted in city sanitation policy change. The strategy was adopted by local businesses, creating a path to sustainability and freeing the stakeholders to develop a new strategy. This project responded to United Nations Sustainable Development Goal (SDG) 17, focusing on partnerships, in order to achieve SDG 3, good health and well-being, and SDG 6, clean water and sanitation. The PAR intervention created in this phase has been applied to new challenges in Accra's urban slums and underserved rural areas in northern Ghana, with expanded data collection from more than 4,000 stakeholders.

Keywords
Cross-sector collaboration, municipal government, social determinants of health, cholera, Africa

Points for Practitioners
- Cross-sector collaboration research has transformed government in the United States, but research on this effective yet challenging-to-employ tool has not been widely conducted in developing countries.
- This article describes a long-term project to create a cross-sector collaboration intervention, working with stakeholders in Accra, Ghana.
- The article contributes a detailed analysis of process, advancing the evidence on cross-sector collaboration in developing countries.

INTRODUCTION

Urban slums present complex development challenges that no one organization—including government—can defeat alone. In 2015, the Old Fadama slum of Accra, Ghana had virtually no water or sanitation infrastructure, contributing to diminished quality of health and frequent cholera outbreaks. While the term "slum" may seem to have a negative connotation, the United Nations Human Settlement Program uses this word as the technical term to describe a set of physical conditions, the definition of which includes lack of: durable and permanent housing, sufficient living space, access to safe water and sanitation, and security of tenure that prevents forced evictions (United Nations Human Settlement Program, 2006).[1]

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[1] In this project, the term "slum" was employed by the stakeholders to describe the physical conditions, while the residents of Old Fadama were referred to as the "community." This article uses these terms in that way. An example of this delineation is found in the section Phase 1: Key Informant Interviews, which resulted in (1) focus on the Old Fadama *slum* because it presented one of the biggest challenges to Accra's development, (2) the importance of engaging Old Fadama *community* leaders to design and implement a strategy, and (3) willingness to participate in cross-sector collaboration to solve problems in this *community*.

While not commonly referenced in government planning in the United States, international organizations and developing country governments routinely use the United Nations Sustainable Development Goals (SDGs) to strategize and plan. The SDGs are ambitious targets for achieving sustainable development by the year 2030 (United Nations, 2015). This research utilizes SDG 17, focusing on partnerships, in order to achieve SDG 3, good health and well-being, and SDG 6, clean water and sanitation.

This article describes the concept phase of a long-term participatory action research (PAR) project to advance the body of knowledge on cross-sector collaboration. Cross-sector collaboration occurs when governments, citizens, and non-governmental organizations work together to achieve more than each could when working alone (Bryson, Crosby, & Stone, 2006). This research is robust, and has transformed the practice of social services delivery in the United States (Norris-Tirrell, 2012). However, the evidence is clear that developing-country governments and international development projects have not rigorously implemented these challenging yet important planning methods (Appiah-Kubi, 2020; Kritz, 2017). This research project was designed to introduce a rigorous process of cross-sector collaboration development in Accra, Ghana, supporting stakeholders (members of the community with a long-term stake in the outcome because they live and work there) who wanted to improve community health. The focus of this article is the PAR process that created the cross-sector collaboration priorities, strategies and latrine project, and the resulting theoretical model. The process incorporated community-based participatory research (CBPR), a partnership approach in which various stakeholders throughout a community are involved in all aspects of research (Israel, Schulz, Parker, & Becker, 1998). For this project, first, CBPR was used to understand the Old Fadama community needs and interests;

then, community-driven research (CDR) was used to create projects responsive to community needs (Kusi, 2020).

The PAR process introduced the concept of cross-sector collaboration, educated the stakeholders about the existing evidence, and supported them as they formed their cross-sector collaboration. The participants were representatives of entirely local groups, including members of city government, local non-governmental organizations, and people who lived in the Old Fadama community. They resourced their own participation, made their own strategy decisions, and selected the challenge of installing latrines. Key informant interviews were used to identify a location, barriers to success, and important organizational strengths. Focus groups developed a project strategy. A community survey was designed to reach more people, expanding the number of stakeholders and engaging the community in the central tasks of site selection and latrine management.

The stakeholders' first strategy, improving community health by installing latrines, resulted in a city sanitation policy change. Local businesses adopted the strategy, creating a path to local sustainability. This development freed the stakeholders to develop a new strategy, testing the theory-of-change on new challenges in other slums in Accra as well as underserved rural areas in northern Ghana.

The next section of this article contains the Old Fadama research context, including a historical, political, environmental, and social description. The robust field of cross-sector collaboration in developed countries, and the nascent evidence from developing countries are highlighted and synthesized to explain the interdisciplinary research approach to create a model for addressing Old Fadama's complex challenges at their root cause. This section also describes the initial stakeholders and their roles. The methods section describes in detail the PAR methods and results from each PAR phase. The findings section of this

article includes a flowchart of the PAR intervention, and an evaluation of PAR as a tool for creating and supporting cross-sector collaboration. The findings also describe the first project, latrine installation, and explain how the project shaped the collaboration process. Last, the limitations and conclusion sections describe the theoretical and policy significance of this project, and how the process was expanded.

LITERATURE REVIEW

Old Fadama is one of the largest slums in Accra, an informal settlement with a population of 79,684 when last enumerated in 2009 (Farouk & Owusu, 2012). The population had swelled to an estimated 100,000 by 2015, when this project began. Established in 1981, the community grew steadily, with spikes for a variety of reasons, including a period of intense conflict in 1994 and current drought conditions. Additional shorter-term residents come from throughout the country bringing produce for sale at the nearby Agbogbloshie green market or seeking work, access to health care, and education. Many of the residents do not speak English or any of the local languages in Accra.

Old Fadama occupies 31.3 hectares of land where the Odaw River empties into the Korle Lagoon (Farouk & Owusu, 2012). In 2015, there was virtually no water or sanitation infrastructure, so residents collected excreta in plastic bags and disposed of it in the river, creating heavy silting. Then residents infilled the lagoon—packing the banks with car chassis, refuse and sawdust—to create space for additional housing. These conditions led to frequent flooding, spreading fecal matter into the Agbogbloshie market. When flood waters receded and the market reopened, produce often rested on contaminated soil, causing frequent cholera outbreaks that precipitated the city's decision to enter into a cross-sector collaboration.

Cholera is an acute diarrheal disease caused by unsanitary food or water (Global Task Force on Cholera Control, 2017b). While the disease is preventable with proper sanitation and treatable with antibiotics and oral rehydration salts, it is deadly if left untreated. Part of the World Health Organization's (WHO) Global Task Force on Cholera Control (GTFCC) strategy to eliminate cholera by 2030 is to focus efforts on "hotspots," which are "specific and relatively small areas where the cholera burden is most concentrated and that play a central role in the spread of cholera" (Global Task Force on Cholera Control, 2017a). Hotspots are areas where "cholera-related fatality rates are high, access to health care is limited, and people make do with poor water quality and sanitation systems" (Global Task Force on Cholera Control, 2017).

The WHO estimates that there are 7,976,232 (95% CI: 6,057,512 - 9,035,911) people living in "hotspots" in Ghana (Global Task Force on Cholera Control, 2017). Old Fadama was one such hotspot. Given its location on the river, consistent flooding, recurrent cholera outbreaks, and lack of sanitation infrastructure, effective strategies were needed to improve the living conditions and, ultimately, work towards achieving SDG 6. The GTFCC's roadmap to eliminate cholera by 2030 suggests that cholera can be controlled with a multi-sector approach—including basic water, sanitation, and hygiene (WASH) services. The cross-sector collaboration PAR intervention resulting from this project fills an important research gap on how to create an evidence-based multi-sector approach, utilizing PAR and supporting stakeholders that want to create sustainable solutions to improve community health in the Old Fadama slum.

Cross-Sector Collaboration Background and
Collaboration Principles

In developed countries, cross-sector collaboration research and practice has been conducted for more than a decade. This progress has improved the way that governments—and other collaborating partners—respond to public challenges. Research spans many disparate fields, including public health (Tataw & Rosa-Lugo Jr, 2011; Zahner, Oliver, & Siemering, 2014) and human services delivery (Magrab & Raper, 2010; Mayhew, 2012). The developed-country evidence base identifies design, strategic management and governance as critical areas of research focus (Bryson, Crosby, & Stone, 2015; Bryson et al., 2006; Stone, Crosby, & Bryson, 2013).

The project began with a number of collaboration principles based on the authors' collaboration and international development practice. The below principles, described in figure 1 and outlined below in further detail, were those that were used to create the PAR process and found to be effective.

Figure 1
Collaboration Principles

1. Asking stakeholders to identify something they cannot do within their own sector will lead to identification of a complex challenge.

2. Cross-sector collaboration creates shared understanding, so that complex challenges become a series of technical challenges for which the stakeholders can work as a "technical" team to design solutions.

3. "Middle-out collaboration," a term developed for this project, is necessary when there is a conflicted relationship between government and community stakeholders, and neither is positioned to develop the most effective strategic response to complex challenges.

4. Emergent design and governance—characterized by stakeholders making strategic choices about research methodology, participant selection, context, and projects—will build a strong democratic process.

5. Stakeholders that resource their own participation will have "buy-in," and be more committed to a long-term collaboration process.

6. Community-based participatory research identifies community needs. Community-driven research ensures that projects respond to community needs.

7. Participatory action research provides a level of rigor suitable for strategic management of collaboration around a complex challenge.

Challenge identification. Cross-sector collaboration is challenging in research and practice, so it is called for when complex challenges defeat sectoral efforts. Complex challenges are described in the leadership literature as "adaptive," meaning that the complexity creates a situation where stakeholders perceive not only the solutions

differently, but may even have difficulty agreeing on the problem (Heifetz, 1994). Sometimes called "wicked problems," these challenges are largely social, affecting many different people, systems and sectors and generally defined through finding a solution to the problem itself (Rittel & Webber, 1973). According to both definitions, solutions are best defined according to individual and group interests, values, and ideologies through a process involving multiple parties who are equipped, interested, and able to judge a solution (Tataw & Rosa-Lugo Jr, 2011). Cross-sector collaboration is recommended when there is a clear benefit to be gained by collaborating (Bryson et al., 2015). The collaboration principle was that asking stakeholders to identify a challenge they could not resolve on their own would lead to identification of a complex challenge suitable for resolution through cross-sector collaboration.

Shared understanding. The literature distinguishes complex challenges from "technical" challenges, those for which groups of people or a technical community perceive the problem the same way and would tend to design a solution the same way (Heifetz, 1994). This shared understanding leads to efficient solutions to technical problems. The hope was that a well-designed cross-sector collaboration could create shared understanding of a complex challenge through the facilitator's use of mediation techniques. In mediation, a neutral person organizes and directs a discussion among two or more stakeholders, helping those in conflict come to agreement on a solution to their problem (Bingham, 2009). For this cross-sector collaboration, one of the facilitator's responsibilities was to serve as a mediator. Mediation focuses on the stakeholders' interests rather than their positions, by identifying each stakeholder's basic human and organizational needs, and then prompting stakeholders to come to a consensus by helping them to identify their key similarities and

subsequently their common ground (Bingham, 2009). For this project, mediation techniques supported representatives from different groups of organizations and community members to work together to perceive the complex challenge the same way. For a complex challenge, the stakeholders must develop a shared understanding of the many and diverse problems to be resolved. This process is crucial because problems cannot be solved where stakeholders do not agree on the problems. Once there was shared understanding about problems, the collaboration principle was that the stakeholders would be able to work as a "technical" team to design solutions.

Middle-out collaboration. The previous evidence, found through a systematic review of the developing-country literature to undergird the project, was that in developing countries, cross-sector collaboration often worked "top-down" (government-mandated) consistent with the flow of development aid funding, or "bottom-up" (community-driven), through CBPR (Kritz, 2017). These processes are anchored in powerful constituencies that help to orient the work. By contrast, the data from Accra seemed to suggest that neither government nor community, in this conflicted environment, was positioned to lead the most effective strategy on a complex challenge. This collaboration principle built on developed-country evidence that non-governmental organizations are important for filling gaps in government service, especially in the area of needs assessment (Eschenfelder, 2010). The term "middle-out collaboration" was developed to describe this project's new approach. Catholic sisters, known in Ghana for their moral leadership, demonstrated capacity for work with communities, and long-term commitment to filling gaps in government social service delivery, were engaged to sit in the "middle," building a bridge "out" between government and community. Through the sisters' engagement, lessons

learned in implementing at the grassroots level could inform government policy and grassroots organizations could be empowered through this participation.

Emergent design and governance. Collaborative governance is an explicit strategy for using multilateral, consensus-oriented processes to incorporate stakeholder input into government policy and planning (Ansell & Gash, 2008). When cross-sector collaboration is not government-mandated, the literature suggests starting with a small group of stakeholders and expanding the collaboration as the momentum grows (Bryson et al., 2015). This principle incorporates emergent design and governance, which is characterized by stakeholders making strategic choices about research methodology, participant selection, context, and projects. The research team supported the stakeholders so that middle-out collaboration could bring community lessons into government strategy.

Stakeholder buy-in. The collaboration principle was that stakeholders would only resource something they were committed to doing, and would therefore be more committed to the cross-sector collaboration. If stakeholders used their own resources to participate, they would formulate a joint strategy consistent with their own organizational priorities and decisions rather than for external payment. For this reason, the research budget did not include stakeholder payments or monetary benefits, except reimbursement for travel costs.

Community-based and -driven research. The model incorporates CBPR to understand the community and CDR to create projects responsive to community needs (Kusi, 2020).

Participatory action research. A PAR process involves researchers and participants working together to define the problem and formulate the research questions (Stringer, 1999). The overarching purpose of this project—which was shared with and agreed to by the initial stakeholders and all stakeholders throughout the process—was to work with stakeholders to generate knowledge about how to create a systematic, evidence-based approach to cross-sector collaboration around complex challenges in a developing country. A PAR methodology was employed in order to meet the stakeholders' needs in various complex environments including an urban slum, a diffuse city agency, and the contexts of multiple congregations of Catholic sisters, all learning to plan strategically and work together as they moved from better-served rural areas to an urban slum. Participatory action research involves two steps: the creation of new knowledge, such as in typical research, and an additional step to create organizational action and change (Greenwood & Levin, 1998). In PAR, researchers and participants work together to define problems and formulate research questions and solutions (Cornwall & Jewkes, 1995). This research method couples knowledge generation—such as would occur in traditional research—with an additional component: a process to create or support organizational action and change (Cornwall & Jewkes, 1995; Greenwood & Levin, 1998).

The Stakeholders

Figure 2 describes the stakeholders at the end of the concept phase.

Figure 2
Stakeholder Structure
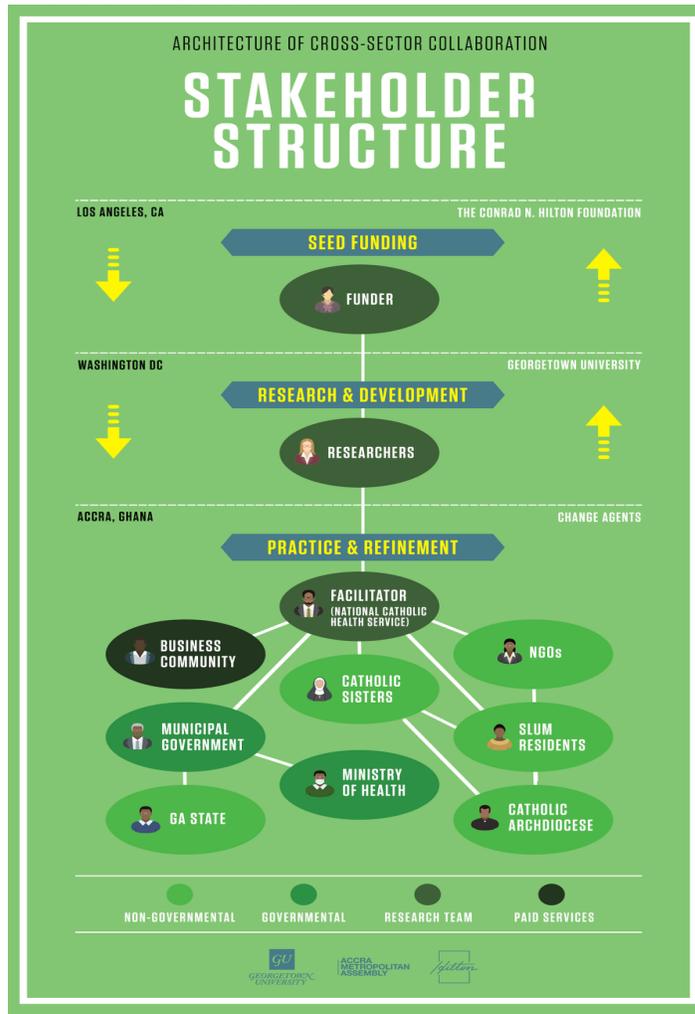
The middle-out stakeholder identification was purposive, with a goal of identifying organizations that work closely with poor and marginalized communities. Catholic sisters were selected because they are perhaps the best-known actors in Ghana that make consistent, long-term commitments to communities in need. The middle-out collaboration began by interviewing four Catholic sisters, Ghanaian leaders of congregations (religious organizations) that had worked with poor and marginalized communities in an urban setting. Faith organizations are nearly absent from the collaboration literature (Kritz, 2017), so it was not clear if the sisters would enroll. However, one sister (the "Lead Sister") did, and she chose Old Fadama as a place she had long wanted to work, but had been hesitant to enter because the challenge was so great. As the project became more concrete, she educated and enrolled several additional sisters from different congregations who shared her interest.

Little is known about effective public health partnerships in Africa, or about what the concept of a "partnership" means in practice, or how to operationalize the concept, so it was unclear what to expect from government participation (Barnes, Brown, & Harman, 2016). Initial interviews with technical officers of the Accra Metropolitan Assembly Department of Public Health (AMA) showed that its typical efforts, successful in other areas, had been unsuccessful in Old Fadama. However, the evidence suggests that sectoral failure is an antecedent to cross-sector collaboration, and a facilitating organization can assist collaboration formation (Bryson et al., 2006). Consistent with the evidence, because of the Catholic sisters' engagement the AMA became an enthusiastic partner. They supported community involvement, provided public and environmental health research to inform stakeholders' decision making, and enabled coordination among other AMA offices. Later, the AMA scoped projects, developed plans, and provided resources for permits, effectively

changing the city's policy guidelines around Old Fadama slum improvement.

Next, leadership from the Old Fadama Youth Development Association (OFADA) enrolled. This was Old Fadama's community association governed by the chiefs (elders) of the sixteen tribes represented in Old Fadama. The association represents the Old Fadama residents, although this group is not homogeneous; decision-making and negotiation often take place along tribal lines (Paller, 2014). A number of community members later enrolled as research participants to provide input on the collaboration and on the latrine project.

The research director and facilitator (the authors of this article) and another National Catholic Health Service (NCHS) officer made up the research team. NCHS, the association of Ghana's Catholic healthcare delivery organizations for an estimated one-fourth of the country's healthcare, provided early guidance on collaboration with the sisters. The collaboration facilitator served as the lead field researcher. He was given the responsibility for collecting data as well as linking, bridging, brokering, mediating, and serving as an intermediary between the collaboration stakeholders, based on the prior evidence (Kritz, 2017). The second NCHS officer came on board later in the project, to collect data and serve in the important role of community liaison, as reported in the Kusi article (Kusi, 2020).

Through a continuous process of interviews, focus groups and a community survey, the research team created a platform for stakeholder discussions. The research team helped to establish a shared language reflecting stakeholders' beliefs, identified in the initial interviews, in the cultural value placed on working together. Through discussions, the stakeholders identified community priorities, and the research team triangulated these with government priorities. Stakeholders came to understand

their respective roles in supporting community development, reached consensus in developing a sanitation management strategy, and made decisions about their own contributions to the strategy. Each stakeholder group informed and sought input from its own important constituencies. For example, the AMA consulted with the Ga State, a politically powerful Accra group with historic ownership interest in the Old Fadama land. Another example is NCHS's consultations with the Ghana Catholic Bishops Conference and the Office of the Metropolitan Archbishop, that represented the hierarchy of the Catholic Church and supported the sisters' working in a coordinated manner.

METHODS

The study was conducted from January 2015 to December 2018. Study participants provided informed consent before taking part in this research. The Social Science and Behavioral Institutional Review Board at Georgetown University (Protocol No. 2015-0261), and the Ghana Health Service Ethical Review Committee (Protocol No. GHS-ERC 10/03/15) granted research approval. In addition to the study participants whose results are reported here, this article references other stakeholders who participated in the cross-sector collaboration but who did not participate in the formal research study, usually because the research team felt that the process had achieved saturation.

Participatory action research incorporates local priorities, processes, and perspectives (Cornwall & Jewkes, 1995). At the beginning, the three initial research participants were asked to identify a challenge that they would like to try to address through cross-sector collaboration, using their own resources and applying for funding. As described in the literature review, a PAR project couples knowledge generation with organizational action and change (Cornwall & Jewkes, 1995; Greenwood &

Levin, 1998). The research team and participants worked together to create the collaboration, establish a research agenda, and collect and analyze data on stakeholders' opinions in order to identify key criteria to use to prepare a project strategy, strategically manage the cross-sector collaboration, transform each participating organizations' practices in comparison with the way they had worked in the past and the way other organizations work, and incorporate the resulting knowledge into the PAR process. Throughout the process, the research team identified theories in the developed and developing country literature, examined them, and interrogated them.

This project adopted general principles of qualitative research (Miles, Huberman, & Saldana, 2014), in that the research team incorporated a holistic understanding of the context of each of the stakeholder organizations, including their structures, history with cross-sector collaboration, cultures, organizational norms, and strategies. Through the use of qualitative methods, the research team and the stakeholders were able to understand their organizations' practices within their own contexts, why cross-sector collaboration was a tool they would employ, and where evidence could inform their decision-making (Lincoln, 1992). The methodology of the project was reflexive, flexible, and iterative (Cornwall & Jewkes, 1995). Throughout the process, the research team used purposive sampling to select participants based on their perspective and role (Stringer, 1999), and intensity sampling based on the understanding of current information and the need to fill remaining gaps (Patton, 2015). The process was conducted in English except where otherwise noted. Questionnaires, discussion guides, community survey questions, and survey results are available upon request.

In the initial discussions with the Lead Sister and the AMA it became clear that they wanted to develop and implement a longer-term, sustainable approach to the

challenges in the Old Fadama slum. Preliminary interviews were used to identify the stakeholders and the Old Fadama slum as a location for the study, as well as themes that the stakeholders considered important. These themes were incorporated into the cross-sector collaboration design. The research team educated the stakeholders about the cross-sector collaboration evidence base, and the stakeholders began to make decisions informed by the evidence—either following the evidence, or if they departed from it, using it as a prompt to explain why they were doing so. The research team suggested initial steps, with significant input by the Lead Sister and the AMA.

The research team launched a series of focus groups to increase participation and create a shared perception of the challenges and unique roles and responsibilities of each stakeholder. The interviews and focus groups informed survey design around local concepts of shared responsibility and the importance of working together. The focus groups allowed the research team to observe stakeholder interactions within the context of their own organization and between organizations. The research team took participant observation notes at all interviews and focus groups, as well as during the survey.

The community liaison led data collection for the survey, working with the facilitator and a team from the community to continue purposive sampling. For this phase, the community was the unit of analysis so research team employed CBPR, a widely used public health approach focused on equalizing power relationships between academic and community research partners. Consistent core principles of CBPR include: genuine partnership and co-learning, capacity building of community members in research, applying findings to benefit all partners, and long-term partnership commitments (Wallerstein & Duran, 2010). As described in the Kusi article, the PAR model incorporated CBPR to understand the community's needs and interests

and CDR to create community projects (Kusi, 2020). The community survey provided the same opportunity to observe stakeholder reactions, as well as expand participation in the collaboration and inform the latrine project design.

Participatory Action Research Phases

As the analysis of the above-described activities proceeded, it became clear that there were three distinct PAR phases of the process (see Figure 3). Interviews identified a location, barriers to success, and organizational strengths. Interviews continued throughout the process, as each new research participant joined the collaboration and the study. Focus groups identified community priorities and government priorities, created strategies, and created a latrine project to address the first priority. The survey increased community participation.

Reflecting PAR principles developed around priority-setting, throughout the process the research team trained the stakeholders on relevant evidence, supporting decision-making and collecting data to feed back into the process (Patten, Mitton, & Donaldson, 2006). Each phase resulted in decision-making by consensus, meaning that all stakeholders were in agreement, which led to the next phase. The process unfolded as follows.

Phase 1: Key informant interviews. Interviews, in phase 1, were used to educate the interviewees about cross-sector collaboration. These in-depth, one to four hour, semi-structured interviews were with ten potential stakeholders including five non-governmental (four Catholic sisters and NCHS), six government (three AMA and three Ghana Health Service) and one community member. Qualitative content analysis identified areas of consensus, important strategies to explore, and terms, common expressions, and key concepts related to cross-sector collaboration in Accra.

The stakeholders understood cross-sector collaboration as a method through which they naturally operated in some cases, and appreciated that it is valued as a challenging though highly effective approach. There was consensus on Old Fadama the three most important priorities to explore: (1) focus on the Old Fadama slum because it presented one of the biggest challenges to Accra's development, (2) the importance of engaging Old Fadama community leaders to design and implement a strategy, and (3) willingness to participate in cross-sector collaboration to solve problems in this community.

Phase 2: Focus group discussions. There were four focus group discussions (FGDs) that were designed to identify priorities, strategic opportunities for action, and areas of consensus in order to create a project (see Figure 3). The research team designed and facilitated the FGDs, providing consultation on cross-sector collaboration principles and theory to inform the stakeholders. Stakeholders agreed on new participants who were recruited, anticipating that they might play a role in implementing the strategies or projects. Discussions were audio recorded, with permission. Because participant observation was important, the research team captured interactions through note taking, including recording non-verbal expressions. Qualitative content analysis was used to understand participants' shared opinions, making these FGDs an important tool to strategically manage the cross-sector collaboration.

Through the FGDs, two themes from the discussions became clear: Process Management of the cross-sector collaboration, and Project Strategy, the "work" of the collaboration. The FGDs were used to strategically manage the cross-sector collaboration, identify priorities, map strategies, and create a latrine installation project responding to the first priority, sanitation. The FGDs also enrolled additional stakeholders who identified new ways of

addressing challenges and engaged new resources, while informing the government's decision to implement policy change.

Phase 3: Community survey. Community leaders requested a community survey to expand the stakeholders and engage the community in site selection (Kusi, 2020). The community liaison and facilitator administered the survey, working with a team from the Old Fadama community (one of whom was employed by the AMA) that stewarded them and served as translators when necessary. The survey introduced a democratic component into the latrine management. It also explored relationships among the community members, community leaders, and the AMA. The interview guide explained the Catholic sisters' role in the process of cross-sector collaboration, and how it resulted in this first community selected goal of installing and managing latrines in Old Fadama. The questionnaire employed a Likert scale to measure opinions, followed by open-ended questions to help us further understand important details. The survey was pre-tested with sanitation and public health experts from Accra (in and outside Old Fadama) and the United States. There were 59 interviewees.

The survey results reflected the concepts identified in the interviews, which the stakeholders felt validated the survey design and created a mandate for the cross-sector collaboration to move forward in planning with community leaders and members. Results were presented in the form of tables, charts, frequencies, and cross tabulation (bivariate analysis). The research team analyzed the survey responses to identify the most important elements, both positive and negative, to take into account during the development of a latrine installation and management plan. The full survey results are described in the Kusi article (Kusi, 2020). Areas of consensus, defined as occurring when 100% of the

interviewees strongly agree or agree with the statement, were:

- Sanitation management should be supported by the community.
- Members of the community should actively participate in implementing sanitation management.
- It is the duty of community members to participate in and work with any program that involves community development.
- Overall it is nicer to work in a group than to work alone.

These four statements formed the basis for the next phase of planning.

FINDINGS

The findings included a theory-of-change model of the cross-sector collaboration intervention (see Figure 3) and a report of the project results and how these impacted the broader collaboration. The theory-of-change includes the collaboration principles, the PAR process, outputs, outcomes and the lessons learned from the report on the impact sought by the stakeholders.

Theory-of-Change

Grounded theory was employed to consolidate the collaboration principles and PAR process intervention components into a theory-of-change model of the PAR intervention to create cross-sector collaboration (Figure 3). As described above, preliminary interviews identified cross-sector collaboration design themes that the stakeholders believed to be important, and focus groups increased participation and created a shared perception of the challenges and the unique roles and responsibilities of each stakeholder. The interviews and focus groups informed survey design around local concepts of shared responsibility

and the importance of working together. The survey results reflected these concepts, which the stakeholders felt validated the survey design and created a mandate for the cross-sector collaboration to move forward in planning with community leaders and members.

Figure 3. Participatory Action Research Intervention Flowchart
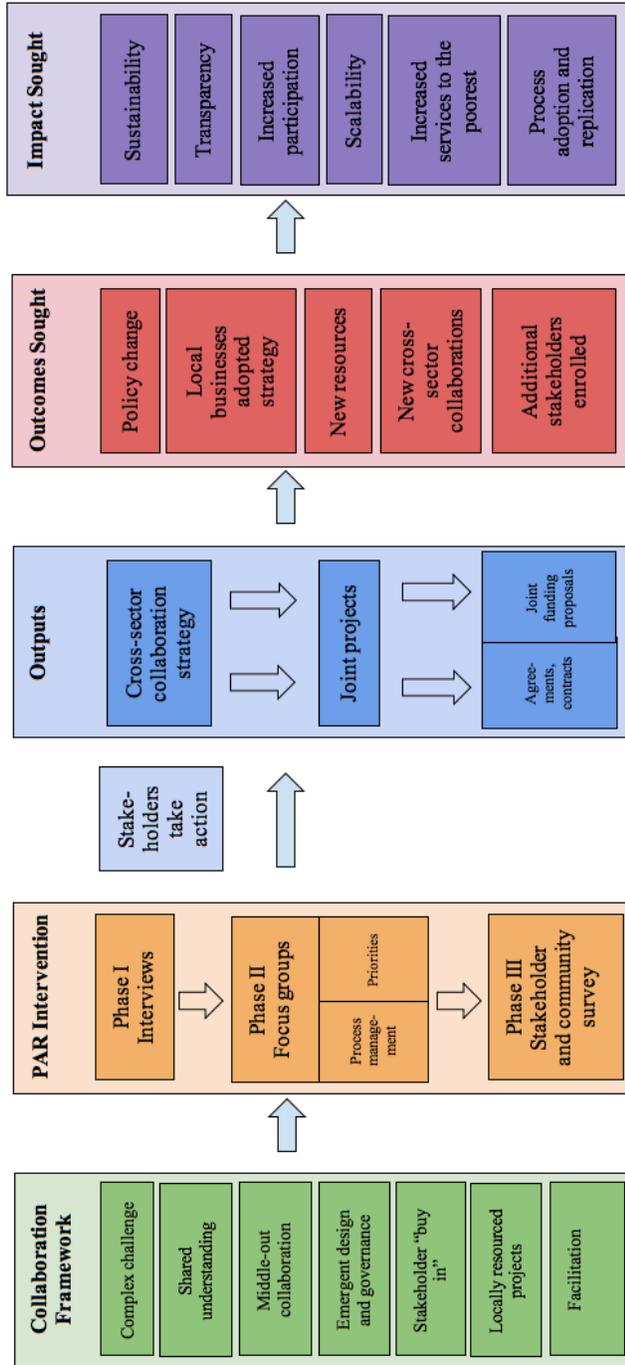
***Lessons Learned: Sanitation Strategy, Latrine Project, and
Community Impact***

Cross-sector collaboration produces different kinds
of effects (Bryson et al., 2006; Innes & Booher, 1999;
Moore, 1995). This project tracked outputs, outcomes, and
impact in order to understand what kinds of effects generated
enthusiasm among the stakeholders.

Outputs, concrete products of the cross-sector
collaboration, were fairly straightforward, although the
project moved more quickly than expected. One of the most
interesting outcomes of the study was observing how quickly
the project moved, despite requiring the stakeholders to buy-
in by resourcing their own participation and any projects. In
fact, the study moved very quickly and stakeholders made
many contributions—for example: meeting space and
refreshments, travel costs (in many cases), land for the
sanitation facility, and time spent negotiating lower
construction costs because this was a "good works" project.
As a result, there were substantial research cost savings that
were reallocated to latrine construction.

The overarching impact typically sought through
cross-sector collaboration is the creation of public value. The
developed-country literature describes public value creation
to include "the extent to which a cross-sector collaboration
achieves its overarching and subsidiary purposes, meets
applicable mandates, and achieves lasting and widespread
benefits at reasonable cost that no single organization could
have achieved alone in a democratically accountable way"
(Page, Stone, Bryson, & Crosby, 2015). In this concept
phase, the research team documented public value creation
in order to develop indicators in later phases of the project.

Public value, in this case, involved latrine
installation. Following the community survey described
above, the collaboration applied to the AMA for permits for
two 12-seat blocks of latrines and two sets of 4-cubicle
bathhouses and accessories. Permitting required planning

approvals from multiple AMA offices that reviewed the collaboration's latrine proposal over a number of months, effectively changing the policy guidelines in order to permit the latrines. Meanwhile, as the permits were sought, AMA employees discussed the application with other colleagues in the sanitation business. The application attracted the interest of multiple sanitation businesses, each of which viewed the strategy as workable, perceived an opportunity, and wanted to participate in policy change. On their own initiative and with their own resources, these companies began to install latrines, creating a path to local sustainability. Thus, the analysis showed that public value, in the form of policy change, created an outcome of increased local participation in sanitation provision.

This example portrays the importance of studying the interplay between a cross-sector collaboration process and programmatic interventions (the work of the collaboration). This interplay informs the research team and stakeholders so that all can better understand the impact of cross-sector collaboration and how it results in benefits at the community level.

Limitations

Limitations of the study are consistent with a PAR process in a proof-of-concept phase. While the results are important for cross-sector collaboration research, the findings need to be considered in light of some methodological issues. First, due to the qualitative nature of the study and the sample size, the findings cannot be generalized beyond the study communities, or in similar contexts in Ghana. While the process itself would be easily replicable, the decision-making by the stakeholders and the results are highly context-specific and therefore limited. However, the research team believes that most interview themes reached saturation, indicating that interview numbers were sufficient enough to draw conclusions from the sample

(Miles et al., 2014; Patton, 2015). Achieving consensus-based decision-making in focus groups served a similar purpose. Importantly, because the stakeholder decision-making was generally consistent with the existing evidence on cross-sector collaboration (although they were not required to make decisions that reflected the current evidence), the resulting theory-of-change reflects the prior evidence, refined by developing-country stakeholders in a low-resource setting.

In a second major limitation, this process was designed so that all study participants would ultimately benefit from and perceive advantages of participating in the collaboration. Hence, their expectation or hope of continued support from the research team likely contributed to bias, in that their responses could have been positively biased. The research team tried to limit this bias by clearly explaining the purpose of the study to participants, requiring that the stakeholders make all decisions, not paying them to participate, and also by using probes to check answers for accuracy. In the beginning, responses were more positive and as the process developed, the stakeholders were quicker to re-direct the strategy or give feedback in disagreement with other stakeholders. Notwithstanding the limitations, this study lays the groundwork for future qualitative research during the pilot phase, and later intervention phases using quantitative analyses and a representative sample.

CONCLUSION

United Nations Sustainable Development Goal 17 promotes "partnerships" as a means to achieve the ambitious SDG targets by 2030. Implementing a novel partnership model in an urban slum environment can have positive impacts on the community, and achieves other SDG targets. The emergent design and governance of this cross-sector collaboration process, strategically managed through PAR,

was effective. The PAR achieved the stakeholders' objectives and the project moved much more quickly than projected. The concept phase achieved proof-of-concept, including an ongoing cross-sector collaboration and the creation of public value, in the form of policy change. As a result, the collaboration fostered community level sanitation initiatives that led to the building of latrines. These actions helped improve the sanitary environment in Old Fadama and the health and well-being of residents.

REFERENCES

Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory, 18*(4), 543-571. doi://dx.doi.org/10.1093/jopart/mum032

Appiah-Kubi, J. (2020). Overcoming community development challenges in urban slums. *Journal of Health and Human Services Administration, 42*(4).

Barnes, A., Brown, G. W., & Harman, S. (2016). Understanding global health and development partnerships: Perspectives from african and global health system professionals. *Journal of Social Science & Medicine, 159*(10), 22-29. doi:10.1016/j.socscimed.2016.04.033

Bingham, L. B. (2009). Collaborative governance: Emerging practices and the incomplete legal framework for public and stakeholder voice. *Journal of Dispute Resolution, 2009*, 269-547.

Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The design and implementation of Cross-Sector collaborations: Propositions from the literature. *Public Administration Review, 66*(Special Issue), 44-55. doi:10.1111/j.1540-6210.2006.00665.x

Bryson, J. M., Crosby, B. C., & Stone, M. M. (2015). Designing and implementing Cross-Sector collaborations: Needed and challenging. *Public Administration Review, 75*(5), 647-663. doi:10.1111/puar.12432

Cornwall, A., & Jewkes, R. (1995). What is participatory research? *Social Science & Medicine, 41*(12), 1667-1676.

Eschenfelder, B. E. (2010). Using community based assessments to strengthen nonprofit-government collaboration and service delivery. *Journal of Health and Human Services Administration, 32*(4), 405-446.

Farouk, B. R., & Owusu, M. (2012). 'If in doubt, count': The role of community-driven enumerations in blocking eviction in old fadama, accra. *Environment & Urbanization, 24*(1), 47-57. doi:10.1177/0956247811434478

Global Task Force on Cholera Control. (2017a). *Ending cholera a roadmap to 2030.* ().World Health Organization. Retrieved from https://www.who.int/cholera/publications/global-roadmap.pdf?ua=1

Global Task Force on Cholera Control. (2017b). *Global task force on cholera control.* ().World Health Organization. Retrieved from https://www.who.int/cholera/task_force/en/

Greenwood, D. J., & Levin, M. (1998). *Introduction to action research*. Thousand Oaks: Sage Publications Inc.

Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: Belknap Press of Harvard University.

Innes, J. E., & Booher, D. E. (1999). Consensus building and complex adaptive systems: A framework for evaluating collaborative planning. *Journal of the American Planning Association, 65*(4), 412-423. Retrieved from https://www.tandfonline.com/doi/pdf/10.1080/01944369908976071?needAccess=true

Israel, B., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). *Review of community-based research: Assessing partnership approaches to improve public health* Annual Reviews Inc. doi:10.1146/annurev.publhealth.19.1.173

Kritz, J. (2017). A realist systematic review of cross-sector collaboration implementation in developing countries & mediation as a useful instrument. *Pepperdine Dispute Resolution Law Journal, 17*(369), 369-403.

Kusi, R. (2020). Building Bridges Between Municipal Government and Urban Slums. *Journal of Health and Human Services Administration, 42*(4).

Lincoln, Y. S. (1992). Sympathetic connections between qualitative methods and health research. *Qualitative Health Research, 2*(4), 375-391.

Magrab, P. R., & Raper, J. (2010). Building strategic relationships. In G. M. Blau, & P. R. Magrab (Eds.), *The leadership equation: Strategies for individuals who are champions for children, youth, and families* (pp. 87-98). Baltimore: Brookes Publishing Co.

Mayhew, F. (2012). Human service delivery in a multi-tier system: The subtleties of collaboration among partners. *Journal of Health and Human Services Administration, 35*(1), 109-135.

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (Third ed.). Newbury Park, CA: Sage.

Moore, M. H. (1995). *Creating public value: Strategic management in government*. Cambridge, MA: Harvard University Press.

Norris-Tirrell, D. (2012). Symposium introduction: Assessing multiple dimensions of collaboration. *Journal of Health and Human Services Administration, 35*(1), 4-10.

Page, S. B., Stone, M. M., Bryson, J. M., & Crosby, B. C. (2015). Public value creation by Cross-Sector collaborations: A framework and challenges of assessment. *Public Administration, 93*(3), 715-732. doi:10.1111/padm.12161

Paller, J. W. (2014). Informal institutions and personal rule in urban ghana. *African Studies Review, 57*(3), 123-142. doi:10.1017/asr.2014.95

Patten, S., Mitton, C., & Donaldson, C. (2006). Using participatory action research to build a priority setting process in a canadian regional health authority. *Social Science & Medicine, 63*(5), 1121-1134. doi:10.1016/j.socscimed.2006.01.033

Patton, M. Q. (2015). *Qualitative research and evaluation methods: Integrating theory and practice* (4th ed.). Newbury Park, CA: Sage.

Rittel, H. W. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences, 4*(2), 155-169. doi:10.1007/BF01405730

Stone, M. M., Crosby, B. C., & Bryson, J. M. (2013). Adaptive governance in collaborations. In C. Cornforth, & W. A. Brown (Eds.), *Nonprofit governance: Innovative perspectives and approaches* (pp. 249-271). London and New York: Routledge.

Stringer, E. T. (1999). *Action research* (2nd ed.). Thousand Oaks: Sage Publications, Inc.

Tataw, D. B., & Rosa-Lugo Jr, B. (2011). Municipal health policy development, planning and implementation: Addressing youth risk factors through participatory governance. *Journal of Health and Human Services Administration, 33*(4), 491-533.

Transforming our world: The 2030 agenda for sustainable development, (2015). Retrieved from https://sustainabledevelopment.un.org/post2015/transformingourworld

United Nations Human Settlement Program. (2006). *State of the world's cities 2006/2007.* (). UK, USA: Earthscan & UN-HABITAT. Retrieved from https://unhabitat.org/books/state-of-the-worlds-cities-20062007/

Wallerstein, N., & Duran, B. (2010). Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *American Journal of Public Health, 100*(S1)

Zahner, S. J., Oliver, T. R., & Siemering, K. Q. (2014). The mobilizing action toward community health partnership study: Multisector partnerships in US counties with improving health metrics. *Preventing Chronic Disease, 11*, 130103. doi:10.5888/pcd11.130103