

Developing Sanitation Solutions and Tackling Complex Challenges in Accra

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Is the project a case of...:

- State-initiated co-creation
- Entrepreneur-driven co-creation
- Grassroots-based co-creation*

**For an elaboration of the typology, please consult the GOGREEN theoretical framework p. 25.*

Integrated case analysis

Before proceeding to the scoring of the GFs, please provide a *3–5 page case analysis* in which you describe the background, history, and national, regional, and local contexts of the case, the problems, and goals addressed by the local collaboration, the participating actors and their relationships, the unfolding of the co-creation process, the most important governance factors (this may include factors other than those in focus in this project), and the generated outputs and outcomes. The conclusion may specify a few lessons learned from the case study.

1) Background, history, and national, regional, and local contexts of the case

Old Fadama, an informal settlement in Accra, Ghana, was established in the 1980s by migrants fleeing tribal violence in the north. It has grown steadily with spikes for a variety of reasons, including a period of intense domestic conflict in 1994 and drought conditions in 2015. Home to 79,684 residents when last enumerated in 2009, in 2015 the Accra municipal government estimated that the number of residents had expanded to 150,000. These included long-term settlers and multigenerational families as well as seasonal migrants coming from throughout the country. These short-term residents were motivated by regular crop cycles to sell produce at the nearby Agbogbloshie green market. Others sought access to health care, education, or work. Many Old Fadama residents did not speak English or the local languages in Accra.

Old Fadama had virtually no water or sanitation infrastructure, so excreta were collected in plastic bags and disposed of in the river that bordered the informal community, creating heavy silting in the nearby Korle Lagoon. Residents infilled the lagoon – packing the banks with car chassis, refuse, and sawdust – to create space for additional housing, which in turn led to flooding that spread fecal matter to the nearby Agbogbloshie market, the largest green market in the city. This cycle led to frequent outbreaks of cholera that spread throughout the country, resulting in hundreds of deaths. By 2015, when the research director for the sanitation project that is the subject of this study identified stakeholders who selected Old Fadama as a complex challenge they would like to address, this informal community – which was locally known as “Sodom and Gomorrah” – was a government “no-go zone” due to the generally lawless environment.

Historically, the Ga State, a politically powerful group, held the land which had cultural significance as a god. Although modern thinkers no longer held that belief, the cultural significance meant that the land had been set aside as an eco-zone. Thus, the population of almost 150,000 had little access to municipal resources. Law enforcement refused to enter the area and government infrastructure planning did not include that geographic area. This led to tensions between community leaders and the municipal government, which had not kept prior political promises about infrastructure upgrades.

In February 2015, Simpson Boateng, Director of Environmental and Public Health for the Accra Metropolitan Assembly (AMA—the mayor’s office), was frustrated by the repeated cholera crises that began in Old Fadama and swept throughout the city and the country. When approached by the research director (Kritz) for this project, he leaped at the opportunity to create a cross-sector collaboration with the community.

2) The aims of the project and the sustainability problems that it seeks to address

In low- and middle-income countries, many international development projects involve complex challenges, with multiple stakeholders representing various, sometimes competing, interests. However, collaboration research is not widely conducted, and in practice, governments and international development programs have not effectively adopted collaboration tools. Consequently, complex challenges in developing countries are being addressed without the advances of this new, yet robust, field. Development researchers agree that rigorous approaches to development are badly needed.

This GOGREEN study reports the concept phase of such a rigorous project – an exploratory project, created in response to the critical evidence gap around cross-sector collaboration. The research director’s goal was to develop an evidence-based, stakeholder-driven participatory action research (PAR) intervention that resolved complex challenges in Old Fadama, could be evaluated at the process level, and had the potential to be scaled-up sustainably. The stakeholders were united under the goal of improving conditions for the residents of Old Fadama via improving sanitation.

The goals of the stakeholders and their sectors shifted over the years. Initially, in 2015, the goal of municipal government was to remove Old Fadama’s residents due to the area’s sacred nature and environmental and public health conditions. However, since successive waves of internal migrants settled in the area and there was little possibility of finding alternative places for them to settle, and efforts to incentivize reverse migration failed, focus shifted towards improving the living conditions of residents. A history of failed infrastructure projects led stakeholders to be modest about their goals. They eventually settled on a pilot sanitation project to be replicated elsewhere if it were successful. The sanitation project would provide women with a safe place to meet their hygienic needs and reduce the practice of open defecation that led to endemic cholera outbreaks.

The non-governmental participants had the general goal of improving living conditions. They were particularly focused on the plight of vulnerable women. However, because the community focused on sanitation, the non-governmental participants first focused on sanitation in order to respond to the community’s request. Participants agreed at the outset that distributing water to children was the least

politicized activity that would garner the least criticism and be less likely to result in negative consequences to the participants.

However, within a few months, the government and non-governmental stakeholders agreed with the community to focus on sanitation because, as the community said, “cholera is killing us today.” All stakeholders agreed in principle that vulnerable women were the second highest priority, but the overall lack of security in the community needed to be remedied, in order for issues of vulnerable women to be addressed.

3) The participants and their interaction and communication in and between meetings

As noted, when the research director for this project approached Boateng, he immediately saw the potential that this kind of research might improve his office’s results in Old Fadama. The Old Fadama collaboration began with three research participants: Boateng; his officer-in-charge for Old Fadama, Imoro Toyibu; and Sr. Matilda Sorkpor, HDR, a Ghanaian Catholic sister who worked to build a bridge between the government and the community.

In June 2015, heavy flooding that killed hundreds of people in Accra was attributed to Old Fadama, and the AMA bulldozed the portion of the settlement that was encroaching on the river. The media captured images of violence and signs such as “Before 2016 You’ll See ‘Buku Harm’ [Boko Haram] In Ghana.” Residents rioted in response to having their homes demolished. Due to the contentious history of the government relationship with the community, the research director introduced a neutral facilitator, Peter Batsa of National Catholic Health Service, along with two Catholic sisters, to build bridges between the conflicted parties. Peter Batsa learned to conduct participatory action research through this project, facilitating the stakeholders to identify needs and create strategies and projects; and as the lead field researcher, which included collecting and analyzing data and administering surveys and micro-interviews in a continuous process to document and analyze the steps.

In July 2017, the AMA hosted the first meeting with community leaders, facilitated by Batsa. As Boateng described: “we had a meeting in my office with Imoro, the Catholic Sisters, and the community leaders. This first meeting was very tense, but, gradually, they have become our friends. Normally, the AMA would make a decision and impose it on the people. The cross-sector collaborations approach involved everybody and made them part of the decision-making process; therefore, they see it as their own. And the government showed good faith and inclusiveness by coming to the meetings and discussing the projects with the community. That is one reason why this project is working. Also, including the Catholic Sisters helped because they are respected and are seen as leaders. As I’ve mentioned, the community had a high level of mistrust of the government but including the Catholics and involving the community in the initiative allowed for an effective collaboration. And it is working very well.”

The PAR proceeded as follows: the research director introduced the concept of cross-sector collaboration and trained Batsa on the evidence base and how to serve as facilitator. They were the research team and worked with the initial research participants in a purposive, consensus-based process to expand the collaboration. In an iterative process, the research team continued to introduce the concept of cross-sector collaboration and educate the stakeholders about the existing evidence. The stakeholders used the

evidence to inform their decision making – either to validate their decisions or, when they departed from the evidence base, as a prompt to explain to the research team why they were doing so. This PAR process created a “stakeholder platform,” a forum for discussions between different stakeholders to identify and prioritize community issues and develop solutions. The PAR process taught participants to stand in the shoes of others, learn from one another, develop a shared understanding of the challenge, and work together.

4) How often do they meet, and do they communicate between meetings?

As the collaboration took shape, the PAR process continuously expanded the number of participants. PAR was used to create a “stakeholder platform,” a forum that allowed stakeholders to identify and prioritize community issues and develop solutions. The process allowed government officials to interface with the chiefs – the tribal elders – of sixteen tribes of Old Fadama. Through a series of focus group discussions, the research participants identified numerous priorities: clean water and sanitation, community violence, the need to support vulnerable populations of kayayei women who carry goods in the markets (typically balanced on their heads), solid waste management, and a clinic. Of these, sanitation was the highest priority due to the reoccurring cholera outbreaks. Their first priority, sanitation, led to a sanitation strategy and latrine and bathhouse project.

The evidence-based cross-sector collaboration framework was created through 4 initial formal key informant stakeholder interviews, 24 focus groups, and an additional survey administered to 59 participants. Throughout the process, hundreds of micro-interviews were used to clarify and cross-check the data, and to triangulate participants’ opinions among those working on sanitation. Meetings were held as needed to advance the work of the stakeholder platform.

5) The role and forms of knowledge sharing, coordination and joint problem-solving

N/A

6) The relation between consensus and conflict and the handling of the latter

From the beginning of the project, stakeholder decisions were made by consensus. This was not a requirement, but naturally happened (coached by the facilitator and research director) and continued throughout the process. Due to political tensions and fears of another demolition, participants reached a consensus to install portable latrines. However, the director of environmental and public health attended an international conference on migration and realized that the collaboration intervention was a novel solution. He advocated to the mayor for installment of permanent latrines “care for residents while they [were] there” in Old Fadama. The installation resulted in an important policy change where the Accra Metropolitan Assembly reversed its position on upgrading the infrastructure of Old Fadama. Following a community survey that revealed widespread support of the latrine installation plan, the latrines and bathhouses were installed with the help of donations and community volunteers.

There were heavy delays in 2017 due to government elections. The delays caused the stakeholders to spend extensive time working issues which allowed them to establish a “culture of maintenance,” taking a serious look at issues related to sustainability. The AMA entered a long-term public-private partnership with stakeholders to manage the latrines. This process helped validate the principle that a project

resourced with local – rather than international – funding contributed to stakeholder buy-in and ensured greater long-term project sustainability. The latrine and bathhouse installation both created and reinforced the local policy change. Local sanitation businesses learned of the project, saw it as workable, and wanted to participate in the policy change. On their own initiative and with their own resources, the businesses began to install latrines and bathhouses in Old Fadama, creating a path to local sustainability.

After the sanitation project's success, stakeholders expanded the scope of cross-sector collaboration to address other concerns that were previously brought up. The results of these other cases were used to validate and refine the collaboration intervention. This participatory action research intervention managed to succeed where prior non-evidence-based interventions failed. In the beginning, the prevailing attitude was that the "government should fix it," but as the participatory action research process continued, there was a shift and community leadership took on some of the responsibilities of collaborative leadership in tackling complex challenges.

While the overall results were encouraging, the sanitation facility ran into difficulties with management when day-to-day operations were handed off to a manager from the community. He stole proceeds from the latrine usage and was removed from management, which was taken over by the community secretariat who contracted with a local sanitation business to run the facility. As funds are rebuilt, the project is on its way to sustainability.

7) The role and form of leadership: lead actor, steering group and/or collective leadership

The facilitator exercised facilitative leadership of the process. His leadership style and the research approach, of encouraging collaboration where each stakeholder exercised leadership consistent with their positioning and sector/role, created the context for stakeholders to lead aspects of the work. Other stakeholders, leaders in their respective fields such as municipal planning or construction, may or may not have used facilitative approaches; their leadership styles tended more toward command and control because they were leading to accomplish discrete tasks. For example, the Director of Environmental and Public Health tended to exercise command and control leadership because he said he felt a sense of urgency to meet community health needs. The construction contractor exercised facilitative leadership with the community; and command and control with his firm's project team. The Catholic sisters involved in the project had the goal of befriending each stakeholder and encouraging them to see the best in one another. Their leadership tended to be a style of encouragement that could be characterized as moral leadership. Stakeholders that were community leaders requested a survey to engage a broad range of community members. However, for work planning, they tended to favor a control and command leadership style, so the work of the facilitator was essential to ensure that community members' voices were included throughout implementation.

8) The temporal unfolding of the co-creation process: major shifts and ups and downs

N/A

9) The most important governance factors (may include factors other than those in focus in this project)

Governance factors included the use of consensus to strengthen the collaboration; the use of middle-out collaboration to build a bridge between parties in conflict; the exclusive use of emergent design and governance up until public-private partnership was created; the requirement of stakeholder buy-in in the form of contribution to the project; and the need for a skilled facilitator to both build consensus and continuously manage and triangulate results. These governance factors highlight the intentional work of the research director and facilitator to employ the best evidence on resolving complex challenges, with a particular focus on evidence from peace, and conflict, particularly the evidence from dispute resolution.

The following governance factors scored 1.

6. Strategic agenda-setting by means of translation. This project took the approach of harmonizing, educating the stakeholders about the best evidence, globally, on how to build collaboration. However, the stakeholders were coached to make their own decisions, and if they departed from the evidence, it was used as a prompt to get them to explain their departure. Nearly every interviewee (all except one) mentioned the project's alignment with the SDGs. I was frankly quite surprised at the frequent, detailed reference to the SDGs by nearly all interview participants. However, this is consistent with the Minister of Local Government and municipalities' mandate that the job of their public servants is to "localize" the SDGs.

10. The capacity to leverage support from authorities to enable local collaboration. Interviewees were unanimously in agreement that higher-level authority was an important support for the project. Given the conflicted nature of this community, high-level support was important, because without it, technical agents would not have entered the community.

12. Clarification of interdependence vis-à-vis common problem and joint vision. To begin this project, the research director asked the initial stakeholders from multiple sectors (public health, non-governmental and community) to identify a challenge that they were not able to address on their own to identify a true complex challenge and sector failure.

The research participants chose Old Fadama with the understanding that their own prior efforts there had failed.

13. Trust-building and conflict mediation. As the director of public health stated: "The project had the full political support of the former mayor and current mayor, as well as the new Minister of Sanitation. The Sodom and Gomorrah community was fierce and violent and did not trust the government at all; it was a no-go area. This is because the government made a lot of promises that were not fulfilled. The people also felt insecure because they thought the government was bent on getting them out of the area they occupied. We had a meeting in my office with Imoro, the Catholic Sisters, and the community leaders. This first meeting was very tense, but, gradually, they have become our friends. Normally, the AMA would make a decision and impose it on the people. The cross-sector collaborations approach involved everybody and made them part of the decision-making process; therefore, they see it as their own. And the government showed good faith and inclusiveness by coming to the meetings and discussing the projects with the community. That is one reason why this project is working. Also, including the Catholic Sisters helped

because they are respected and are seen as leaders. As I've mentioned, the community had a high level of mistrust of the government, but including the Catholics and involving the community in the initiative allowed for an effective collaboration. And it is working very well."

15. Ongoing critical self-reflection and learning (i.e., process and/or developmental evaluation). Using the psychology of democracy framework, the research team coached the stakeholders to develop skills for democratic actualization. Key components of coaching included reminding stakeholders they could be wrong and should question their prior assumptions; to revise their plans as needed; and to include in their process values such as creating a new, higher-value experience (collaboration) in order to better meet the needs of the community.

16. Exercise of facilitative leadership. hinges on facilitation. The facilitation literature describes this vital role as creating consultative meetings and platforms for discussion to build relationships and accountability between differently resourced organizations with different capacities. A number of case studies in the literature detail important facilitation skills and responsibilities. These include research, as well as catalyzing, linking, bridging, brokering or serving as an intermediary, coordinating, convening and facilitating. Due to the complexity of Old Fadama's problems, all of these responsibilities were deemed essential.

10) The generated outputs and outcomes

The outputs (a joint strategy, joint funding proposals) were fairly straightforward and reflected the latrine project strategy and results. One important outcome that the process created was policy change, in that the AMA reversed its position on upgrading Old Fadama. While this outcome itself was important, it was even more important in light of the fact that the policy change began in one political administration and was formalized when a new government was elected. Many international development projects fail due to government transitions. In this case, the rigorous PAR process and relatively large (three hundred) number of stakeholders seemed to support policy change. The research team observed that policy change was important to the participants, and also possible in a relatively short period of time. Another important outcome was that local sanitation business solutions attuned the stakeholders to the possibility of creating business solutions for other challenges. Given their focus from the beginning on sustainability, this learning was extremely important to the participants.

11) Lessons learned about the conditions for co-creating green solutions

What happens when communities cannot solve the problems that most affect them, and individuals believe they are powerless? In Old Fadama, as in other places, the prevailing attitude at the start of the study was that "the government should fix it." Cross-sector collaboration led these stakeholders to embrace a different perspective. Prior to this PAR intervention, the AMA and Old Fadama community leaders were working together to accomplish discrete tasks, but without achieving the municipal government's planning goals or meeting community needs. However, attention to process, with the services of a research team, Batsa as a skilled facilitator, and Sr. Rita as community liaison helped create a shared language that reflected the cultural value placed on working as a team, which the survey demonstrated. The role of community leaders and the process of creating increased community participation were both important. The survey demonstrated that it was necessary to develop greater community trust in the government and understanding of Old Fadama's role in the collaboration to expand

participation and create accountability for decisions. This shift was necessary for the community leadership to fully represent its own interests and assume the responsibilities of collaborative leadership in this challenging environment.

NB: This brief write-up of the case study features some quotes from Simpson Boateng, who passed away several years ago. Thus, he was not able to participate in the GOGREEN interviews. However, there were extensive recorded interviews of his experience with the project and the quotes in this write-up were taken from those interviews.

Scoring and analysis of governance factors

1. Perceived importance of biosphere conditions

QCA score:

- 0
 0.33
 0.66
 1

Scoring confidence:

- Low confidence
 Medium confidence
 High confidence

Data sources:

- Interviews
 Documents
 Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Environment was consistently mentioned throughout interviews including discussion of the multitude of issues facing Old Fadama. It became clear during these interviews that environment was an underlying key driver of many issues, ranging from cholera outbreaks to the safety of women living in Old Fadama to the lack of sanitation. Given the lack of infrastructure and massive overpopulation of Old Fadama, the area had become toxic and unhealthy conditions had spread downriver. Examples that nearly all (if not all) participants cited in initial meetings included:

- a) E-waste burning in the nearby Agbogbloshe e-waste dump was deemed very unhealthy and to contribute to numerous pulmonary, kidney, eye and other diseases as well as to degrade the environment to the detriment of all inhabitants.
- b) Dumping of human remains in the nearby river and lagoon was considered sad as well as unsanitary, and a sign that the area was not governed; this was also an issue that motivated political response because historically, the area had been considered to be sacred so burial (open or otherwise) was culturally prohibited in this area.
- c) The river and lagoon water were tested extensively and found devoid of aquatic life.
- d) Open defecation was considered common and an object of attention for international cooperation and assistance (UNICEF).

All of the stakeholders agreed that the area was not suitable for human habitation due to the environmental conditions. Social issues were mentioned more frequently in the earlier meetings, because it seemed that the stakeholders felt that the social issues were more actionable than environmental issues. However, the expansion of the international right to water and later sanitation empowered the stakeholders to advocate and plan on this issue. As an environment has become more of focus of international attention, it has become clear that it motivated the participants more than it may have seemed when the project started.

2. Legislation, programs, and formal goals

QCA score:

- 0
 0.33
 0.66
 1

Scoring confidence:

- Low confidence
 Medium confidence
 High confidence

Data sources:

- Interviews
 Documents
 Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Prior to this project beginning, the area Old Fadama occupied had been set aside as an eco zone. As a result, the municipal government policy meant that the area was not on the city plan, and therefore not eligible for infrastructure budgetary allocations. As a result, regional and national policy reflected that legal status. These policies (particularly the municipal policy) meant that collaboration was more challenging, because as frequently stated in focus group meetings, municipal public servants expressed that community members were “not supposed to be there.” The government feared that collaboration with the community implied that they gave permission for the community to remain in that location. Collaboration marked an informal policy change of the Accra government, where focus shifted away from relocating residents and demolition towards improving living conditions (with the eventual hope no one would live there). Formal policy change occurred when the government approved the sanitation facility plans. Approval of sanitation facility plans required: changing the city plan, allocating budget to that new area of the city plan, allocating human resources underneath that budget, approving, sanitation facility permits, and building and implementing a sanitation facility. That policy change supported the project; and after that point, policies were supportive of co-creation and collaboration.

3. Relative openness of public governance paradigms

QCA score:

- 0
 0.33
 0.66
 1

Scoring confidence:

- Low confidence
 Medium confidence
 High confidence

Data sources:

- Interviews
 Documents
 Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

The government was in a period of political transition when the sanitation project was first begun. The former political regime was against improving Old Fadama, whereas the new political regime was more receptive to the idea. This project was started by private stakeholders who later looped in public stakeholders (due to a volatile political situation).

In general, the government at the beginning of the project was ill equipped to involve private stakeholders. Consistent with the evidence at the time, public-private partnerships were more common than collaborations, but PPPs were essentially contracting mechanisms, often devoid of collaboration in principle. As government became acquainted with the collaboration evidence, government employees—ranging from ministers all the way down through field officers for the municipal government—became quickly adept at adapting to stakeholder feedback. This hinged on being taught that an evidence-based approach meant stakeholder feedback should be incorporated where possible; and when not possible, should be fully considered and the alternate (chosen) approach should be explained.

Part of the government’s lack of willingness to collaborate/lack of openness to stakeholder feedback had to do with the fact that the settlement was informal. As the community became formalized through the various activities of this project and others, overtime, government became much more open to collaboration.

4. Formalized institutional channels for citizen participation and community mobilization

- | | | |
|---------------------------------------|---|--|
| <u>QCA score:</u> | <u>Scoring confidence:</u> | <u>Data sources:</u> |
| <input checked="" type="checkbox"/> 0 | <input type="checkbox"/> Low confidence | <input checked="" type="checkbox"/> Interviews |
| <input type="checkbox"/> 0.33 | <input type="checkbox"/> Medium confidence | <input checked="" type="checkbox"/> Documents |
| <input type="checkbox"/> 0.66 | <input checked="" type="checkbox"/> High confidence | <input checked="" type="checkbox"/> Observations |
| <input type="checkbox"/> 1 | | |

Please elaborate on the reasoning behind your scoring for this governance factor:

Formal communities typically interfaced with Ghana’s political leadership and public servants through community secretariats, community boards and community organizations typically found in low- and middle-income countries. However, the channels of participation for informal communities were generally limited to high level political meetings (which took an advocacy format and were not deemed to have been productive at resolving issues in the past) or absent. Thus, prior to this project, the formal channels available to Old Fadama were high level political meetings when political leaders chose to meet, as requested by the community.

5. Mechanism for ensuring top-down government and bottom-up social accountability

- | | | |
|--|---|--|
| <u>QCA score:</u> | <u>Scoring confidence:</u> | <u>Data sources:</u> |
| <input type="checkbox"/> 0 | <input type="checkbox"/> Low confidence | <input checked="" type="checkbox"/> Interviews |
| <input type="checkbox"/> 0.33 | <input type="checkbox"/> Medium confidence | <input type="checkbox"/> Documents |
| <input checked="" type="checkbox"/> 0.66 | <input checked="" type="checkbox"/> High confidence | <input checked="" type="checkbox"/> Observations |
| <input type="checkbox"/> 1 | | |

Please elaborate on the reasoning behind your scoring for this governance factor:

From a legal/policy perspective, once policy change was enacted and sanitation facilities could be implemented, all processes required government accountability checks and approvals typical of infrastructure design and implementation. For example, the office of Town and Country Planning changed the city plan; budget allocations were made through typical annual planning processes, enabling infrastructure investment; infrastructure departments designed sanitation facilities and went through quality check processes and met safety requirements typical for any other infrastructure project; contracting proceeded, with a typical RFP, that was openly competed; human resources were reallocated, consistent with typical human resources processes. However, this question was scored as a .66 because prior to policy change, there was little if any top down or bottom up accountability because Old Fadama was ungoverned, meaning that it was considered a government “no-go zone” (for example, police would not enter the community, there were few if any aspects of infrastructure, and government workers were forbidden to enter without express permission of high level municipal authorities.

6. Strategic agenda-setting by means of translation

QCA score:

- 0
 0.33
 0.66
 1

Scoring confidence:

- Low confidence
 Medium confidence
 High confidence

Data sources:

- Interviews
 Documents
 Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Nearly every interviewee (all except one) mentioned the project's alignment with the SDGs. I was frankly quite surprised at the frequent, detailed reference to the SDGs by nearly all interview participants. However, this is consistent with the Minister of Local Government and municipalities' mandate that the job of their public servants is to "localize" the SDGs.

There were numerous mentions of how the SDGs guided the project at the outset, global sustainability frameworks (that became national and local frameworks/policies) that supported the planning. Examples included (interviewee's role in parenthesis):

- a) The project aligns with UN SDGs, notably SDG 17. Nationally, adherence to environmental and public health regulations ensures compliance with sustainability standards, enhancing project impact (community leader).
- b) From the outset, our priority was aligning with SDGs related to the environment. Project adjustments aligning with sustainability laws and goals significantly supported the collaborative effort, ensuring compliance and shared objectives (infrastructure contractor).
- c) Adhering to the SDG frameworks enhances our impact, fosters partnerships, and ensures a holistic approach to addressing sustainability challenges in Old Fadama.

Examples of openness included participation, shifting of policies, and resource allocation. This project was mostly grassroots catalyzed and led, with local bureaucracy support. The public governance support seemed to vary depending on who was in political power.

7. Construction of narratives about successful multi-actor collaboration

QCA score:

- 0
 0.33
 0.66
 1

Scoring confidence:

- Low confidence
 Medium confidence
 High confidence

Data sources:

- Interviews
 Documents
 Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Our data collection prior to GOGREEN delved into this question/issue in detail. The data was collected from fifteen core stakeholders from government, non-governmental and community sectors, who were research participants to the project on which this GOGREEN study is centered. They all expressed that they were unfamiliar with the term "cross-sector collaboration" but had prior experience with it in practice. They agreed that cross-sector collaboration would be useful in solving Old Fadama's problems and expressed willingness to participate. They recognized that each organization represented at the meeting could play a unique role in responding to challenges in Old Fadama. Themes that had consensus were the

value of working together as a team, the AMA’s knowledge of community problems, the Department of Public Health’s history of working with the community (although the interventions were deemed unsuccessful, the attempts were positively regarded—so related to the GOGREEN protocol this would be characterized as a positive learning from a negative experience), the Catholic sisters’ leadership in social development work with communities, the importance of community leadership, and recognition of the leadership that citizens could offer and the obligation that citizens have to take part in community development.

8. Building or harnessing institutional platforms and arenas

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Interviewees described regular meeting schedules created for this project, that became venues for discussing and identifying other community issues and working to resolve them. In the beginning, formal stakeholder meetings were held in the mayor’s office, in the community Secretariat, and in the office of the Catholic sisters who acted as conveners and bridge-builders for the project. In fact, the beginning of our project marked the first time the community met with the municipal Director of Public Health in his office.

As sanitation facility implementation began, a quarterly stakeholder meeting cycle was adopted for updates to the leadership of the collaborating organizations. In addition, there were routine biweekly in person meetings at the Old Fadama Secretariat, where stakeholders would convene and give updates. The facilitator provided updates to invitees who could not attend meetings to keep them up to date on progress.

9. Provision of access to blended financing

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

One of the “Collaboration Principles” undergirding this project was that the research team would not provide resources for projects. However, the stakeholders began providing resources for the collaboration, which lightened the research budget and meant that there were funds left over which the research team allocated to the sanitation project that is the subject of this GOGREEN study. One interviewee’s comments provided a nice synthesis of others’ remarks. He said: The combination of diverse funding sources has fostered a collaborative ethos, encouraging active engagement from various actors. It promotes inclusive

decision-making and ensures that stakeholders, each with unique perspectives and interests, contribute to shaping the project's strategies and outcomes. This financial diversity enhances the project's resilience and adaptability.

10. The capacity to leverage support from authorities to enable local collaboration

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Interviewees were unanimously in agreement that higher-level authority was an important support for the project. They defined high-level authority support as the mayor's office. Examples included that the mayor's office:

- a) donated land for the sanitation facility;
- b) supported the project from the beginning despite political tension, violence, and having previously designated the community as a "no-go zone";
- c) approved permits for the sanitation facility;
- d) amended the city plan to allow infrastructure upgrading in Old Fadama;
- e) provided architectural plans for the facility, for free;
- f) allocated human resources to manage the project.

Mid-level authority was defined as municipal staff. Examples of mid-level authority support included:

- g) ease of operations (this was low at the beginning and grew over time);
- h) expertise and validation of technical staff.

All authorities' support created a sense of shared responsibility and commitment among stakeholders. Some stakeholders that joined later on in the sanitation project were government actors as they witnessed the potential. Of the project. Their help was essential in expediting the tedious process of navigating bureaucracy – issuing permits, rallying political support, collecting materials/resources. [insert explicit named examples]

11. Inclusion and empowerment of relevant and affected actors

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

The marginalized actors, for purposes of this question, are defined as the community secretariat, a key project stakeholder. They, in turn, asked for a community survey of project beneficiaries (future users) in order to ensure community needs were met, expand the number of stakeholders and engage community

members on latrine construction. This perspective is consistent with the evidence on working with underserved populations. Leaders wanted community member input on latrine management to address maintenance, sustainability, reinvestment of the proceeds, site selection including factors such as migration, population density and movement, and access for waste removal trucks.

The community secretariat, a key project stakeholder, asked for a community survey of project beneficiaries in order to ensure community needs were met, expand the number of stakeholders and engage community members on latrine construction. Various stakeholders offered design suggestions which were incorporated into the project plan. For example, the community was engaged in site selection and the initial design of a block of latrines was amended with community input, to add a bathhouse and clothes washing facilities to the latrine block.

12. Clarification of interdependence vis-à-vis common problem and joint vision

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

To begin this project, the research director asked the initial stakeholders from multiple sectors (public health, non-governmental and community) to identify a challenge that they were not able to address on their own to identify a true complex challenge and sector failure.

The research participants chose to work together in Old Fadama because they understood that their own prior efforts there had failed and were likely to continue failing unless they took a different approach.

The municipal government seemed to be a logical partner because Old Fadama was an urban informal community. When the research director contacted the director of public health of the Accra Metropolitan Assembly (the AMA, the mayor's office), he responded with enthusiasm and relief: "Thank God you are here. We need help. Everything we have tried in this community seems to fail. I am meeting with the press again this morning about the cholera epidemic that originated there. We can't find the solution to this problem on our own. I am willing to try anything." The director of public health documented how similar efforts combatted cholera in other communities but did not work in Old Fadama. He perceived these repeated epidemics as reflecting sector failure. The mayor's office and public health director had tried earlier to address the root cause of cholera, but failed to install latrines.

The community secretary failed to bring needed development to Old Fadama. Through many brief interviews with women market workers, the Catholic sisters learned why market women were working there, but the sisters failed to begin a project with them, even though they badly wanted to, because she could "not begin to touch the need" – it was so great. However, rather than being daunted by the information that others' prior efforts failed, this information seemed to energize the research participants. The shared knowledge created a shared perspective – even one about shared failures – that seemed to create enthusiasm.

After a series of failed sanitation projects in Old Fadama, community leaders were aware that just one community sector (or an outside NGO) was not enough to tackle this challenge adequately. As such, the stakeholders chose to work together, despite conflicts in leadership styles and differing visions for the project. Knowing that they could not do it by themselves given their historic attempts, actors expressed their need for cross-sectoral collaboration. To increase interdependence, decisions were made by consensus, which was defined as all core stakeholders for a particular step agreed on the step to be taken; or for the survey, that 100% of survey participants agreed or strongly agreed with the statement.

The stakeholders identified Old Fadama as the challenge that they wanted to address. However, because urban informal communities are such a pervasive and growing issue, it was not clear whether any informal community would be perceived as sector failure – perhaps these were environments where each sector could point to another that had failed. Or, perhaps informal communities had replaced rural areas as the “end of the road,” areas the government needed to address, to take a next step in providing services, but not necessarily perceived as failures.

However, Old Fadama stood out for one particular reason: multiple times per year, cholera epidemics began there and swept throughout the country. The local government received constant negative local media attention, and more recent epidemics were reported in the international media, worrying high-level government officials that the reports would have a negative effect on tourism and the choice of Ghana as a venue for hosting international meetings.

13. Trust-building and conflict mediation

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

As noted, there was a city policy against upgrading Old Fadama. The collaboration filed for permits and entered into negotiations with the mayor’s office to change city policy. The permits required planning approvals from multiple municipal offices that reviewed the collaboration’s latrine proposal. The approvals generated conflict as, for five months, the director of public health, facilitator, and community liaison contacted various city offices in turn, seeking permit approvals. Each office provided input and then directed them to another office for a new approval. It appeared that no office wanted to give the final approval for the plan, as no one wanted responsibility for finalizing such a change to city policy.

Although intense and frustrating, this protracted negotiation served the important purpose of improving collaboration and longer-term planning for sustainability. As the permit proposal circulated, receiving different levels of approval, stakeholders were called upon to identify and analyze key barriers to sustainability. For example, the government identified that Old Fadama was not included in city planning because the informal community developed on city land that was set aside as a floodplain. This meant, as noted earlier, that resources needed to be reallocated for the planning. In addition, the city planning gap

meant there were no roads for sanitation waste pickup trucks. However, the community leaders explained how the city's partial demolition – which destroyed latrines and created a newly cleared area – presented an opportunity by creating space for the new sanitation facility and access road.

Catholic sisters have a long-held value of creating charitable networks to support communities in need. When funding was needed for latrine installation, the sisters used their charitable networks to raise foundation funds to supplement the research funding that was reallocated to latrine installation. The facilitation and research team from NCHS determined that community leaders from multiple tribes regularly engaged in destroying one another's infrastructure. For example, political leaders from multiple tribes had used the headquarters of the community association for years. However, after an election, it had been destroyed in an act of supposed political vigilantism to keep another political party from using the facility. This cycle of violence was attributed to political retaliation, but just as often these kinds of actions seemed to be a guise for other issues. Thus, latrine signage about the collaboration helped insulate the latrines from destruction.

Finally, all stakeholders identified the absence of a maintenance culture in the government. Their implementation planning addressed this gap through a community survey that bolstered community leaders' knowledge of the cross-sector collaboration process, coaching them on how to take responsibility for various aspects of latrine management. The city donated the land, approved infrastructure investment, and finally entered a long-term public-private partnership with the stakeholders to manage the latrines.

14. Use of experimental tools for innovation

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

This governance factor is not applicable.

15. Ongoing critical self-reflection and learning (i.e., process and/or developmental evaluation):

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

Recent groundbreaking work on the psychology of democracy was helpful to explain stakeholders' individual transformation as they developed new skills working together. The study of the psychology of democracy comes from the psychology of intergroup relations, informed by the psychological foundations of democracy and dictatorship in countries with a variety of governance systems. A cultural psychology

framework looks at human psychology through a rich holistic perspective on the relationship between an individual and their culture. The research team felt this holistic approach was required to explore individual transformation in the context of this cross-sector collaboration intervention.

Using the psychology of democracy framework, the research team coached the stakeholders to develop skills for democratic actualization. Key components of coaching included reminding stakeholders they could be wrong and should question their prior assumptions; to revise their plans as needed; and to include in their process values such as creating a new, higher-value experience (collaboration) in order to better meet the needs of the community.

16. Exercise of facilitative leadership:

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this governance factor:

In developing countries, cross-sector collaboration often works “top-down” consistent with the flow of development aid funding, or “bottom-up,” through work with communities. These processes are anchored in powerful constituencies that help to orient the work. Because of the conflicted relationship between the municipal government and Old Fadama, neither government nor community was positioned to lead the other. An organization was needed to bridge this divide, and the research director created the term “middle-out collaboration” to define this leadership role.

Collaboration hinges on facilitation. The facilitation literature describes this vital role as creating consultative meetings and platforms for discussion to build relationships and accountability between differently resourced organizations with different capacities. A number of case studies in the literature detail important facilitation skills and responsibilities. These include research, as well as catalyzing, linking, bridging, brokering or serving as an intermediary, coordinating, convening and facilitating. Due to the complexity of Old Fadama’s problems, all of these responsibilities were deemed essential.

The creation of a rigorous PAR process yielded an unexpected benefit: the creation of trust between the research team and participants. The research team highlighted the research agenda as a mechanism for building transparency and created an understanding that the PAR process had an audience beyond those who were involved and those who were in Ghana. This transparency, coupled with continuous cross-checking and feeding data back to the research participants, became the cornerstone of relationships of trust. Many research participants expressed how it felt important to them that their opinions were collected, analyzed, shared with others, and built upon.

Outcome variable: Successfully co-created green transitions

The outcome variable ‘co-created green transitions’ will be scored in two parts. First, ‘co-creation’ will be scored based on an assessment of whether the participants in the initiative, project or process engaged in collaborative problem-solving that fostered creative ideas and innovative solutions (data will consist of survey data combined with interviews and documents). Next, ‘green transitions’ will be scored based on an assessment of whether the initiative, project or process has fulfilled or is expected to fulfill its green goals, ambitions and aspirations (data will consist of survey data combined with interviews and internal and/or external evaluation reports, including scientific publications).

The scoring of this variable is done in two parts:

- 1. Is the developed solution based on collaborative problem-solving spurring creativity and innovative solutions?*
- 2. Does the developed solution engender a green transition?*

This scoring should be conducted based on both the survey and complementary green outcome evaluations. Please consult Sections 4.4 and 6.10 in the Research Protocol for more details.

1. Is the developed solution co-created?

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Survey
- Interviews
- Documents
- Observations

Please elaborate on the reasoning behind your scoring for this part of the governance factor, including the data sources used for the scoring.

The results were consistent across the interviews and survey. The interview results were strikingly similar except for one interviewee, a Catholic Sister, who is an outlier—who has always been a bit of an outlier in the project in terms of mindset, being less collaborative than most. The Catholic Sister in question had worked on similar failed projects to improve Old Fadama, and was rightfully apprehensive about the project and made sure to voice her opposition at anything she thought would harm the women and children living in the community.

The following governance factors scored 1.

- 6. Strategic agenda-setting by means of translation
- 10. The capacity to leverage support from authorities to enable local collaboration
- 12. Clarification of interdependence vis-à-vis common problem and joint vision
- 13. Trust-building and conflict mediation
- 15. Ongoing critical self-reflection and learning (i.e., process and/or developmental evaluation)
- 16. Exercise of facilitative leadership

These governance factors Highlight the intentional work of the research director and facilitator to employ the best evidence on resolving complex challenges, with a particular focus on evidence from peace, and conflict, particularly the evidence from dispute resolution.

If possible, please insert your survey responses in the table below (in % for each response), including the mean/average % for each survey item.

	Strong. dis.	Dis.	Slight. dis.	Neither agr/dis	Slight. agree	Agree	Strong. agree	Mean
1. Problem-solving mobilized different experiences, and/or ideas and/or forms of knowledge to develop new perspectives	0	0	0	0	0	6.67%	86.67%	87.50%
2. Through the collaborative problem-solving process, different experiences and/or ideas and/or forms of knowledge have been mobilized to search for unconventional solutions	0	0	0	0	0	20.00%	80.00%	85.00%
3. The collaborative problem-solving process mobilized different experiences, and/or ideas and/or forms of knowledge to search for solutions that go beyond standard/text-book solutions	0	0	0	0	6.67%	13.33%	73.33%	83.88%
4. The co-created solution breaks with established practices	0	0	0	6.67%	13.33%	20.00%	53.33%	78.63%
5. The co-created solution disrupts conventional wisdom	0	13.33%	0	0	0	20.00%	53.33%	76.75%
6. The co-created solution offers new ideas to address the green transition problem	0	0	0	0	6.67%	13.33%	73.33%	83.88%
7. I'm supportive of the co-created solution	0	0	0	0	0	6.67%	86.67%	86.63%
8. I'm content with the overall collaborative process of the project	0	0	0	0	0	20.00%	73.33%	84.88%

9. I feel the multi-actor collaboration process was a prerequisite for the success of the project	0	0	0	0	0	20.00%	73.33%	84.88%
10. I'm satisfied by the results of the co-creation effort in terms of expected impact on the welfare of the community	0	0	0	0	6.67%	6.67%	80.00%	84.88%
11. The collaborative interaction in the project has led to an innovative solution	0	0	0	0	0	20.00%	73.33%	84.88%
12. The actors involved in the project are engaged in collaborative interaction that stimulated creative problem-solving	0	0	0	0	0	13.33%	80.00%	85.75%
13. The co-created solution meets the proposed goals of the project	0	0	0	0	6.67%	33.33%	53.33%	81.25%
14. The co-created solution will be durable and robust in the long run	0	0	0	0	0	6.67%	86.67%	86.63%
15. The co-created solution is expected to significantly improve sustainability for the whole community	0	0	0	0	0	26.67%	73.33%	84.13%

2. Does the developed solution engender a green transition¹?

QCA score:

- 0
- 0.33
- 0.66
- 1

Scoring confidence:

- Low confidence
- Medium confidence
- High confidence

Data sources:

- Survey
- Interviews
- Documents
- Observations

¹ By "green transitions", we mean objectives and aspirations that correspond to at least one of the Green SDGs (SDG 6, 7, 11, 12, 13, 14, 15). The project does not have to refer explicitly to the green SDGs, but the project's green objectives

Please elaborate on the reasoning behind your scoring for this part of the governance factor, including the data sources used for the scoring:

The participants believe this was a successful project, demonstrated by the fact that interviewees recognized their green transition project had created policy change, in which other businesses participated, which created a pathway to sustainability. Due to the satisfaction of the survey participants, the ratings are largely positive and the average rating is high.

If possible, please insert your survey responses in the table below (in % for each response).

1. The project:	Yes	No	Don't know
...did not produce any green transition solution			
...is expected to produce/has produced a green transition solution aiming to avoid a worsening in the status quo			
...is expected to produce/has produced a green transition solution aiming to maintain the status quo			
...is expected to produce/has produced a green transition solution aiming to improve the status quo	100%		

Please list all the informants you have interviewed for the case study (list project role + interview date):

PF; 2023-10-03
 PP, PF, O; 2023-09-14
 PP, BA; 2023-09-18
 PP, BA; 2023-10-12
 PP, O; 2023-09-18
 PP, O; 2023-09-18
 PP, O; 2023-09-18
 PF, O; 2023-10-27
 O, PF; 2023-05-28

Please list all the observations you have made (type of meeting/workshop/etc. + observation date):

2015.02.03 Interview anonymous
 2015.02.05 Interview anonymous
 2015.02.05 Interview anonymous
 2015.02.06 Interview Department of Environmental and Public Health

2015.07.14 2.14 PM Meeting 1 AMA Pre-Agbogblc
2015.07.14 4.31 PM Meeting 2 AMA Post-Agbogb
2015.07.15 2.16 PM Focus Group Sisters.MP3
2015.07.15 9.58 AM 2.16 PM Focus Group Sisters
2015.07.15 9.58 AM Focus Group Sisters.MP3
2015.07.15 11.20 AM Focus Group Sisters.MP3
2015.07.15 Focus Group Sisters Notes
2015.07.16 1.41 PM Focus Group All Stakeholders
2015.07.16 1.41 PM Focus Group All Stakeholders
2015.07.16 FGM Full Stakeholder Attendance List
2015.07.16 Focus Group Notes All Stakeholders.d
2015.09.14 9.20 AM Focus...ateng Sorkpor Device 1.MP3
2015.09.14 9.22 AM Focus...ateng Sorkpor Device 2.MP3
2015.09.29 Focus Group AMA and Sister Matilda.MP3
2016.04.27 FGD 1 Sisters Audio Device 1.MP3
2016.04.27 FGD 1 Sisters Audio Device 2.MP3
2016.04.27 FGD1 Cont'd Sisters Audio Device 1.MP3
2016.04.27 FGD1 Cont'd Sisters Audio Device 2.MP3
2016.04.28 FGD with City Authority.MP3
2016.05.06 FGD with City Authority.MP3

In 2017, meetings were informal and continuous as needed, as the latrine project was negotiated between city offices.

Please note the response rate for the survey/measurement of outcome variable:

24/24. The Qualtrics response rate was initially low because the participants had difficulty understanding the questions and answering. Peter Batsa met with approx. 15 of the participants from the community and walked them through the survey and answered questions about the meaning of certain words and questions.