Water, sanitation and hygiene partners collaborating to combat severe cholera outbreaks during the State of Emergency in Zimbabwe

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Abstract

This paper aims to understand the value of collaboration in a ‘state of emergency’ situation, featuring the case of the water, sanitation and hygiene (WASH) sector in Zimbabwe over the period 2008–2012. During this period, a group of stakeholders engaged in a structured collaboration, called the WASH cluster. This initiative was taken to respond to severe and frequent cholera outbreaks. Over these 5 years, the collaborating partners engaged in a voluntary partnership, which attracted attention due to the ascribed improvements of some key health indicators. Drawing from the body of literature on collaboration, the research confirms the applicability of findings on both the process and key features of successful collaboration and was able to position the evolution of the Zimbabwean case in the continuum of collaboration arrangements proposed in the literature. Likewise, the specific sequencing and causality of steps in the creation and development of the Zimbabwean WASH cluster were found to match those of the collaborative pathway. Finally, the findings confirm the general applicability of principles of collaboration, although the evaluation of its outcomes poses challenges. In addition, the research found that inasmuch as prominent leaders enhance collaboration, leadership by permanent government bodies promotes sustainability of the collaborative approach.

Keywords: Collaboration; Emergency response; Non-governmental organizations; WASH; Zimbabwe

Abbreviations and acronyms

AFDB African Development Bank
EHA Environmental Health Alliance
IASC Inter-Agency Standing Committee
NAC National Action Committee
NCU National Coordination Unit

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1. Introduction

This paper aims to understand the value of collaboration in a ‘state of emergency’ situation and to test the applicability of the key findings from various other authors and establish whether the same factors are valid for this particular case of collaboration.

The existence of problems that go beyond the scope of a single agency has compelled organizations to work together towards solving such issues. Service provision in areas of child welfare, homelessness, habitat conservation, watershed management and public health presents issues that go beyond the expertise of a single organization – hence the case for inter-agency collaboration. Austin (2000) states that the 21st century will be the age of alliances and collaborations since we are now in the era when no organization succeeds on its own. He notes that ‘farsighted leaders’ are opting to go beyond the institutional obstacles and face the challenge of collaboration because they consider the results of combined efforts to be effective. This collaborative working towards problem-solving or provision of services overcomes challenges faced by individual working and it brings benefits that go far beyond its objectives of establishment. Rosenbaum (2006) notes that despite uncertainty about its outcomes, the collaborative approach is likely to continue growing, due to limited government resources and support from the international donor community.

Internationally, the United Nations through the Inter-Agency Standing Committee (IASC) has been promoting this collaborative working through the cluster method. The humanitarian response was seen as ad hoc, unpredictable and having some gaps; therefore, the IASC designed the cluster system to deal with these shortcomings (IASC Guidance Note, 2006). This idea was introduced globally in 2005 as a humanitarian reform aimed at strengthening coordination systems, humanitarian financing and the effectiveness of the humanitarian response with an emphasis on partnership to support these areas of reform. The method of working together seeks to make humanitarian assistance more effective by introducing a system of sectoral coordination with a designated lead organization. This brings complementary strengths together in a coherent manner and improves the humanitarian response. The cluster initiative is applied in countries with humanitarian crises that are beyond the scope of one agency’s mandate and Zimbabwe is one of the countries where the method has been implemented.

Gray (1989), as cited in Wildridge et al. (2004), notes that collaboration improves the quality of solutions and increases the capability of, as well as the capacity for, response. The process of collaboration also stimulates creativity as partners work together and share ideas, and it also promotes better use of resources. Friedman et al. (2007) support the idea that the benefits of inter-agency collaboration in the care system include a reduction in the duplication of effort, improved communication and promotion of more integrated services. Collaborative work provides financial, political and organizational benefits for
its members – the collaborators (Wohlstetter et al., 2004). In addition, the individual partners benefit from the process and it is therefore likely to work effectively.

There is some confusion in the terminology of the concept of working together. The complexities of defining the concept emanate from the diverse arrangements of working together, hence the use of different terms. Terms such as collaboration, partnerships, networks, joint working, alliances and cooperation are interchangeably used to describe working together to achieve a common goal. According to Sandfort & Milward (2007), the terminology used in this concept of the working together of organizations implies different motivations that have brought members together. For instance, they point out that

‘collaboration implies a consensual relationship created to improve operations whereas partnership reinforces the notion of reciprocal motivation. In contrast, joint ventures and strategic alliances are terms adopted from the private business world and imply purposive relationships designed to maximize efficiency and exert influence over competitors’ (Sandfort & Milward, 2007, p. 157).

Gray (1989), as cited in Wildridge et al. (2004), defines collaboration as a temporary and evolving forum for addressing a problem. According to Gazley & Brudney (2007), collaboration is a process whereby organizations seek mutual solutions to a common problem that can be difficult to address for individual organizations. In simple terms, collaboration is the working together of two or more organizations towards achieving a common goal. Some authors call this relationship ‘partnership working’ (Wildridge et al., 2004), some call it ‘strategic alliance’ (Austin, 2000), some use the term ‘cross-sector alliances’ (Wohlstetter et al., 2004) and others use the term ‘inter-agency collaboration’ (Friedman et al., 2007). Thus, as Atkinson (2007) points out, while some common understandings about collaboration have emerged, a universally accepted definition is yet to be established. Wildridge et al. (2004) have identified common features in the definitions, which are:

- a relationship between organizations, groups or individuals;
- a common aim, vision or goal;
- the improvement and enhancing of access to services by users.

However, academia describes it as a continuum moving from informal to formal relationships, showing the variation in collaboration intensity (Reilly, 2001; Sandfort & Milward, 2007; Keast & Mandell, 2011). Figure 1 shows a common representation of the continuum.

At the informal end, there is cooperation, which is a relationship supported by informal or personal relationships, while at the formalized end, there is service integration, which involves the provision of a new service by two or more organizations. In-between these extremes there is coordination, which is defined as a process whereby organizations change their actions to work together but still remain independent, and collaboration is where organizations share resources, authority and rewards. Keast & Mandell (2011) distinguish the three relationship levels – cooperation, coordination and collaboration – according

![Fig. 1. Continuum of collaborative service arrangements. Source: Sandfort & Milward (2007).](https://iwaponline.com/wp/article-pdf/17/2/370/405164/017020370.pdf)
to their characteristics, and Table 1 shows the different characteristics of these relationships as identified by Keast & Mandell (2011).

According to Sandfort & Milward (2007), collaboration involves multiple mechanisms such as staff integration, joint planning or joint budgeting. Therefore, it is inevitable to have cooperation and coordination in such relations; thus, collaboration can incorporate the first two arrangements in the continuum of collaborative arrangements and even results in provision of integrated services. Because of this intertwining nature, these terms are interchangeably used by many authors. For the purpose of this paper, the term collaboration will be used to mean the working together of organizations towards achievement of a common goal.

The paper provides a general introduction to collaboration and then explores research by several authors on collaboration in various fields. The key findings from these studies were used to construct an analytical framework for use in this study. The methods for data collection are presented, followed by a description of the Zimbabwean sanitation and water context. The paper then presents and discusses the findings leading to the conclusion that the analytical framework is valid for this case also, whilst adding that for sustainability the collaboration process requires leadership by a permanent government body.

1.1. Existing body of literature on collaboration

The authors take as their point of departure a number of theories and results from previous studies on collaboration in different fields and use these as an analytical framework for investigating the water, sanitation and hygiene (WASH) cluster in Zimbabwe. There are a number of studies that have been conducted on collaboration in the field of public health, education, child welfare, public administration and others. Collaboration in the field of water and sanitation, however, is rarely found in the published literature. Most of the literature on ‘collaboration’ in water and sanitation is on public–private partnerships, which is another form of working together but in most cases it is for profit-making. Rarely is there literature on non-profit-making collaboration in water and sanitation.

Table 1. Distinguishing characteristics of cooperation, coordination and collaboration.

<table>
<thead>
<tr>
<th>Cooperation</th>
<th>Coordination</th>
<th>Collaboration</th>
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<tbody>
<tr>
<td>Low trust – unstable relations</td>
<td>Medium trust – based on prior relations</td>
<td>High trust – stable relations</td>
</tr>
<tr>
<td>Infrequent communication flows</td>
<td>Structured communication flows</td>
<td>Thick communication flows</td>
</tr>
<tr>
<td>Known information sharing</td>
<td>Project-related and direct information sharing</td>
<td>Tacit information sharing</td>
</tr>
<tr>
<td>Adjusting actions</td>
<td>Joint projects, joint funding, joint policy</td>
<td>Systems change</td>
</tr>
<tr>
<td>Independent/autonomous goals</td>
<td>Semi-independent goals</td>
<td>Dense interdependent relations and goals</td>
</tr>
<tr>
<td>Power remains with the organization</td>
<td>Power remains with the organization</td>
<td>Shared power</td>
</tr>
<tr>
<td>Resource remains own</td>
<td>Shared resources around projects</td>
<td>Pooled, collective resources</td>
</tr>
<tr>
<td>Commitment and accountability to own agency</td>
<td>Commitment and accountability to own agency and project</td>
<td>Commitment and accountability to the network first</td>
</tr>
<tr>
<td>Relational time frame requirement – short-term</td>
<td>Relational time frame requirement – medium-term often based on prior projects</td>
<td>Relational time frame requirement – long-term 3–5 years</td>
</tr>
</tbody>
</table>

Source: Keast & Mandell (2011).
The researchers explore the topic in various ways. The body of literature on collaboration can be categorized according to the areas investigated by different researchers: (1) importance or benefits of the process; (2) functionality of the process; (3) evaluation of the outcomes; and (4) diversity of the collaborative arrangements. Most of these sources describe and explain the concept of collaboration using information obtained from cases, but very few give a detailed account of the case studies. Three cases from different researchers are provided in this section. One of the countries where collaboration towards service delivery is promoted is the United States of America. Lasker et al. (2001) note that the United States government agencies have invested millions of dollars to promote collaboration in the health sector and there are several alliances, coalitions and consortia that have been formed.

Reilly (2001) conducted a study of collaborative work from four presumed successful cases from different fields, which include the Habitat Conservation Plan for the Desert Tortoise, the Nevada Family Preservation and Family Support Program, the Oregon Watershed Improvement Coalition, and the California Social Work Education Centre Project. For comparison, he also investigated three notable failed cases and derived a collaboration pathway showing that collaboration processes follow certain sequential steps. He noted a selected number of key factors in the successful case studies, which the failed cases lacked. Success was seen to come with formal legal agreements and organizational structures that were designed for clear communication. In addition, the initiators of the successful cases put efforts into ensuring the involvement of all stakeholders affected by the issue. On the other hand, he reported that in most of the failed cases the reason was a failure to involve key citizens. This resulted in a lack of acceptance of the initiatives by local residents. He thus developed a framework of the necessary conditions for collaboration and noted that to achieve positive outcomes in collaboration it requires understanding of both the initial conditions that caused the problem and the historical pattern.

Wohlstetter et al. (2004) investigated strategic alliances for a particular type of public school known as a charter school in the USA. These charter schools were required to find their own resources and this had encouraged them to seek partnership with other organizations. At that time, the level at which the public sector provided educational service in the USA did not meet the schooling needs of the low-income household children. Thus, cross-sectoral alliances were a strategy utilized to locate resources to enrich the capacity of public institutions. The case study of Wohlstetter et al. (2004) concluded that cross-sectoral alliances enhanced the capacity of the schools to improve the quality of their educational systems.

Another study by Keast & Mandell (2011), in Queensland, Australia, showed that the collaboration concept was high on the Australian agenda as evidenced in policy statements and key prime ministerial speeches on improved social service delivery achieved by collaborative approaches. The government of Queensland used the collaborative model of operation in social services to shift from reliance on basic consultation and the top-down approach. Several collaborative initiatives were formed across the government and non-government sectors. In the study of eight initiatives, it was noted that the injection of funds and devoted, purposeful attention had improved the level of interaction of participating agencies, resulting in improved outcomes, and this was supported by positive official evaluation. Ranking the relationships on their continuum of collaboration, the authors found that most of the cases were functioning at either the cooperative or coordinative level, but three were operating at the collaborative level. From their research, Keast & Mandell (2011, p. 13) concluded that ‘collaboration is a valuable tool to deliver public and social benefit’. However, they noted that this requires the use of a greater strategic intent and that collaboration must be designed and implemented to fit the purpose. Furthermore, the authors acknowledged the need for expanded resources and commitment for the process to succeed.
**Key findings derived from the body of literature on collaboration**

**F1: Specifically identified success factors to enhance the collaboration process**

Several aspects have been identified as success factors in the process of working together, by different researchers (London, 1995; Reilly, 2001; Wildridge et al., 2004; Atkinson, 2007; Horwath & Morrison, 2007; Huxham & Vangen, 2009). The common factors identified include: a central purpose that incorporates a shared vision; membership that is representative of the affected interests; a structure with clear roles; frequent and effective communication systems; enough resources (including sufficient funding); and trust. Yet, collaborative relationships rarely give sufficient attention to building these aspects.

Wildridge et al. (2004) added that a conducive environment is also necessary for successful collaboration. Reilly (2001) supported this view that there is the need to continually adapt to the changing environment as well as use a contingent approach when necessary. Effective communication is an important key to building trust, and failure in communication causes mistrust among members, which may lead to a dismantling of collaboration and hence failure. Atkinson (2007) noted that there is a need for high commitment from individuals for collaborative work to be successful. He highlighted that the culture of an organization determines the level of individuals’ commitment to collaborative work. If the culture of an organization supports collaborative work, the staff from such an organization will likely contribute more readily to the process of collaboration.

London (1995) identified the inclusion of all partners who have a role to play in the problem as an additional success factor. This was supported by Reilly (2001), who pointed out that one reason for failure in most collaboration cases was the exclusion of critical stakeholders who had a stake in the issue. For instance, in the case of the Habitat Conservation Plan for the Desert Tortoise, which was a group dealing with emergency listing of the desert tortoise under the federal Endangered Species Act in Nevada, the failure to include some key citizens resulted in a lack of acceptance of the process by local residents. This is in line with London’s (1995) finding on the involvement of well-known leaders. London noted that successful collaborative work is facilitated by the involvement of prominent leaders. His argument was based on the findings of a study by Chrislip & Larson (1994) in six cases, which noted that ‘high level and visible leaders’ brought credibility to the efforts of collaborative work, and enhanced success.

Huxham & Vangen (2009) noted power-sharing as an important aspect in collaboration. These authors stated that there are different points at which power can be shared in collaboration but there is a tendency for those who have the power to control finances to be viewed as more powerful than any other members. The authors argue that all participants in collaboration have power at some point.

**F2: There is a multiplicity of forms for collaborative working**

As noted earlier, there is a variety of arrangements for joint actions by individual agencies. These arrangements, as noted by some authors (Reilly, 2001; Sandfort & Milward, 2007; Keast & Mandell, 2011), show the degree of intensity or formality of the collaborative working. These authors noted that the terms cooperation, coordination, collaboration, and service integration entail the working together of individuals, but that the arrangements differ. Keast & Mandell (2011) presented the characteristics of these arrangements, as shown in Table 1, to differentiate them. So this combined working can grow or increase its intensity following the continuum towards a more formalized arrangement, that
is, collaboration and service integration. However, in practice, these terms are interchangeably used to mean the working together of individuals.

**F3: Collaboration follows sequential steps towards the achievement of the purpose of establishment**

From the studies, it was noted that collaborative working follows some sequential steps. Reilly (2001) noted that the process of collaboration follows a pathway with six steps, which are: identification; formation; implementation; engagement/maintenance; resolution; and evolution. Figure 2 shows Reilly’s collaborative pathway.

Reilly points out that the collaboration process begins with the identification of a problem that requires organizations to work together, thus the group is formed and implementation of the solution...

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**Fig. 2. Collaborative pathway. Source: Reilly (2001).**
begins. The interim successes motivate the members to remain at the table and committed until the resolution of the problem. The outcomes of collaboration may go beyond its intended objectives to produce what he terms ‘by-products’, which are simply extra benefits of the process.

**F4: Empirical investigations on collaboration require further development of methodology**

Researching collaboration cases has been found to be a challenge, and cases of systematic assessment of success, failure and means of implementation of the collaborative approach are few (El Ansari et al., 2001; Reilly, 2001; Rosenbaum, 2006). Sandfort & Milward (2007) note that collaboration provides important benefits to systems and populations but most of these results are not confirmed by empirical investigation. They pointed out that the research design used in a collaboration case in Australia by Fine (2001) did not isolate whether the collaborative administrative arrangements themselves were responsible for the change. Reilly (2001) also noted that the stability of the outcomes of collaboration, and how to minimize the uncertainty associated with collaboration are areas that require further research.

In most of the studies carried out, a case study approach was used to explore the process of collaboration. Reilly (2001) used several cases and gathered information using combined methods of data collection for validation or cross-checking of the information obtained – so-called triangulation. A survey was used in some of the studies, with questionnaires administered to key actors in the collaboration. In an evaluation of collaboration carried out in South Africa, El Ansari et al. (2001) showed that researchers spent several months carrying out a study of five partnerships, and a combined methodology of data collection, including surveys, interviews and published literature, was used to gather the information. In the same way, Reilly (2001) used semi-structured interviews with open-ended questions for both face-to-face and telephone interviews. This use of multiple data collection methods is supported by Patton & Appelbaum (2003), who note that there is no single method that can adequately be used to gather sufficient information to answer research questions. Thus, the use of multiple methods overcomes the bias of using just one method, and the use of triangulation, as stated earlier, to check the reliability of data.

**1.2. Research methodology**

A wide range of literature on the subject of collaboration was covered to obtain the major findings of different researchers. The findings from the body of literature were summarized into four key findings, which were then used as the analytical framework in the investigation of the WASH cluster case in Zimbabwe. These findings concern: (i) specific success factors in collaboration; (ii) specific formats of collaboration; (iii) specific steps in collaboration; and (iv) specific research methodology for studying collaboration.

The summarized findings from the various studies required verification to test their applicability in different fields of collaboration, hence they were used to form the analytical framework for this research. The Zimbabwean WASH cluster is a collaboration of organizations responding to WASH needs in Zimbabwe. The research tested the applicability of the analytical framework by exploring the functioning of the WASH cluster and its contributions in addressing issues of water and sanitation in the country.

Data were collected using four methods: semi-structured interviews, focus group discussions, document reviews, and observation. The study was conducted in four provinces of Zimbabwe: Harare, where the national cluster resides, Bulawayo, Manicaland, and Midlands. Interviews were conducted with the lead organizations, government agencies and non-governmental organizations (NGOs) who were members of the cluster. Three focus group discussions were conducted with the sub-WASH clusters in
Bulawayo, Gweru, and Mutare, where the provincial sub-clusters reside. Secondary data were reviewed and used to triangulate the information obtained from other methods. The observation method was employed in attending a national coordinators’ workshop and a WASH cluster meeting where partners were reporting on their progress, giving updates and reviewing their plans as well as discussing issues of water and sanitation. Since the set-up was not for the purpose of interviews but was rather a natural set-up for the cluster, the possibility of their preparing responses in advance for questions from a researcher was overcome; the partners were interacting in a natural way, hence overcoming the discrepancy found between what people say they do and what they actually do.

1.3. Zimbabwe water and sanitation context

The economic crisis experienced in the country in the past decade has adversely affected the water sector, with a negative effect on the sector’s performance. Prior to the decade of crisis, in the 1990s, the country’s level of service provision was among the highest in sub-Saharan Africa, taking the lead in innovation, policy reform and service provision in the water sector (UNDP, 2010). However, the fortunes were reversed in the last decade due to economic collapse leading to limited investment in the sector. This resulted in a gradual decline of the water and sanitation systems. The situation hit a critical low during 2008/09, when a cholera epidemic affected more than 100,000 people and resulted in about 4,300 deaths. The assessment carried out in 2009 by the donor community showed that the wastewater treatment plants were failing and raw sewage was being discharged into water bodies (AFDB, 2009). In rural areas, lack of maintenance and provision of spare parts by the government led to the dysfunction of boreholes and wells, which are the main sources of water in rural areas of Zimbabwe.

Outbreaks of cholera have become frequent in Zimbabwe since the early 1990s (WHO, 2009) and Figure 3 shows how the disease occurrence has been increasing in past years. Fewer than 800 cholera cases were reported in the 1970s and the country experienced a period during which no cholera cases were reported. In the 1980s sporadic cases were reported and they became more frequent in the 1990s.


Fig. 3. The pattern of occurrence of cholera in Zimbabwe over the past three decades. Source: Evaluation of the Health Cluster Response to the Cholera Outbreak in Zimbabwe (WHO, 2009) (redrawn from the original).
Since the late 1990s and up to the present day, cholera cases have been reported annually, with a high number of cases of more than 4,000.

The severe cholera outbreak of 2008/09 coincided with economic and political challenges in the country. The country was suffering from hyperinflation, and donors left the country due to the political situation at that time. The government structures were weakened by this internal situation and could not respond to the epidemic alone. It was such a situation that encouraged organizations to work together towards problem-solving. The challenges in the WASH sector attracted an international humanitarian response, which promoted the establishment of the WASH cluster in the country to rapidly respond to emergency WASH needs.

2. Research findings

**F1: Specifically identified success factors to enhance the collaboration process**

We found that the Zimbabwean WASH cluster incorporated a number of success factors of collaboration such as inclusion of relevant stakeholders, the setting-up of a coordinating structure with clear roles and responsibilities, a common purpose, and resources. However, the issue of trust-building needs to be considered. The cluster was established with the purpose of coordinating WASH interventions and improving sector performance.

In order to ensure coherence and an effective response to emergencies, the cluster works closely with relevant government departments that have a stake in WASH issues. The government departments that work closely with the cluster include the National Action Committee, which is a department whose mandate is to coordinate and oversee the development and management of water, sanitation and hygiene activities in the country. Some government departments and ministries such as the Department of Civil Protection, the Ministry of Water Resource, Development and Management, the District Development Fund, the Ministry of Health and Child Welfare, and the Ministry of Local Government Rural and Urban Development are also members of the WASH cluster.

The initiative for formation of the WASH cluster was brought by the United Nations, and the lead organizations are UNICEF and Oxfam GB, which are prominent organizations known worldwide for their sector development. There is a possibility that this has added credibility to the cluster method of humanitarian response and hence its acceptance in the country. In addition, the cluster has a coordinating structure and conducts various activities to achieve the goal of responding to WASH emergency needs.

The WASH cluster also mobilizes resources through appealing to the donor community, and the situation in the country has compelled agencies, local and external, to assist with resources (both financial and material). Since the cholera outbreak of 2008/09, it has been reported that the humanitarian community has spent over US$90 million. However, it was noticed that during the data collection period the number of humanitarian emergencies had reduced in the country in relative terms and this had consequently reduced the funding as well as the participation of members.

The issue of trust-building still needs attention in the WASH cluster. This was observed in the concerns raised by some respondents on the allocation of funds to partners, which is done through proposal selection. From the document reviews and interviews conducted, we found that the Strategic Advisory Group

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(SAG) is responsible for reviewing and giving recommendations of proposals for funding. This group consists of some members who are also the implementers of the programmes and who submit their proposals for review. Despite systematic criteria being provided for the selection of proposals, some of the respondents still felt that the procedure was unfair since there is the possibility that those involved in the selection have higher chances of receiving funding than do non-members (of the SAG). In addition, some provincial WASH members feel left out of the monitoring and evaluation of projects by NGOs, and this is likely to affect their level of participation in the cluster. Although the involvement of actors in collaborative activities is crucial, this exercise seems not to be fully implemented.

In short, the cluster has considered most of the success factors needed for collaboration to work. However, it still needs to consider implementing mechanisms that promote trust-building. The inclusion of members on critical or sensitive issues helps to avoid suspicion and promote transparency as well as build trust among partners, hence maintaining the relationship.

**F2: There is a multiplicity of forms for collaborative working**

The Zimbabwean WASH cluster describes itself as ‘an open and formal platform for humanitarian WASH actors to work together to address key weaknesses in the WASH sector as a whole’\(^2\). The constant outbreaks of water-related diseases, especially cholera, drew the attention of organizations involved in the field of WASH in the country. Upon recognition that the efforts by these organizations needed coordination, a Water and Environmental Sanitation Working Group (WES WG) was established, with UNICEF playing the coordinating role. However, a working group is an informal arrangement, so after the Zimbabwe Inter-Agency Standing Committee or Humanitarian Country Team made a recommendation for the formation of clusters, the working group was transformed into today’s WASH cluster with some structural and functional adjustments. This means that the cluster fits into the collaboration segment of Sandfort & Milward’s (2007) continuum of collaborative arrangements. The members execute WASH interventions by drilling and repairing boreholes, constructing latrines, conducting training workshops and holding awareness campaigns. These activities qualify the WASH cluster to fit into the service integration arrangement of the collaborative continuum. Hence, with respect to key finding 2 (F2), we found the cluster to be operating in the segments of collaboration and service integration, which are the more formal collaboration modes in the Sandfort & Milward continuum.

The cluster ensures improved coordination and the effective response of all humanitarian WASH interventions by a mobilized and adequately resourced group of agencies, organizations, NGOs and local communities through established partnerships\(^3\). The forum brings together government ministries, UN agencies, donors, international and local NGOs, the private sector, academic institutions and other organizations working in the field of water and sanitation.

**F3: Collaboration follows sequential steps towards the achievement of the purpose of establishment**

From the research, we found that the WASH cluster follows sequential steps in the implementation of collaborative work in responding to WASH emergency needs in the country. The steps are each explained in the following paragraphs.

\(^1\)http://www.washcluster.info/ (accessed 6 April 2013).
\(^3\)Zimbabwe WASH cluster terms of reference, 2008.
**Step 1.** The first step of the pathway involves identification of a problem that requires a collaborative solution. In the case of the WASH cluster, the diverse stakeholders who extended their assistance to the affected population called for collaboration to coordinate the efforts of different actors, thus avoiding duplication of interventions. Following the identification of the problem, the immediate demand for a solution to save the lives of people from cholera outbreaks stirred up the process of collaboration.

**Step 2.** The second step of the pathway involves the formation and implementation of collaboration. After identification of the problem and decision-making, stakeholders were brought to the table to work together. The members of the WES WG automatically became members upon the transformation of the working group into a cluster.

The cluster is divided into sub-groups that work in specific areas. The sub-groups include the Strategic Advisory Group (SAG), which deliberates on the overall WASH cluster work-plan and responsibilities; the Environmental Health Alliance (EHA), which is responsible for the coordination of an emergency response and the rehabilitation of basic health, and the WASH infrastructure and build capacity for emergency response to disasters in vulnerable populations. The technical group consists of several groups working on different aspects of WASH to provide technical advice on their specific WASH areas to the WASH cluster. Apart from its sub-divisions, the cluster is also decentralized at the provincial level where a lead organization (non-governmental), commonly called the focal agency, is selected to coordinate activities carried out by different members in the province and report to the national WASH cluster. These sub-clusters are chaired by the chairperson of the Provincial Water and Sanitation Sub-Committee (PWSSC) who works closely with the focal agencies.

In order to achieve its objectives, the cluster carries out several activities, which include coordination, information management, capacity-building, resource mobilization, setting of standards and advocating for best WASH practices as well as monitoring and evaluating their programmes. Since coordination remains the mandate of the government, the cluster works closely with the National Coordination Unit, which is the secretariat of the National Action Committee (NAC), the coordinator and overseer of WASH activities in the country. The cluster has developed some coordination mechanisms, which include holding monthly meetings at national and provincial levels as well as conducting workshops where WASH updates are provided and where partners share experiences, best practices and discuss any other WASH issues. In addition, it collects and shares information including the mapping of ‘who/what/where’ – who is doing what and where. This has facilitated the development of the national WASH Atlas, which is published annually, thus improving information management in the sector. During data collection, the majority of the respondents agreed that the WASH cluster had improved sector coordination as well as information management.

As one of its principal objectives, the WASH cluster identifies training needs and supports the training of staff in order to strengthen the capacity of the national and civil society at all levels, from the national to the community level. During the 2008/09 cholera outbreak, capacity-building was one of the strategies used to contain the disease and prepare communities for an emergency response. Training sessions on Participatory Health and Hygiene Education (PHHE), emergency preparedness and community-based management were and are still being conducted. The training of village health workers was of paramount importance to promote quick detection of outbreaks at grassroots level. A total of about 60,000 people were trained (including sinkers of wells, latrine builders, village pump mechanics, pump minders, water point committee members and PHHE trainers) in the period 2008/09, and more were trained after the severe outbreak
according to records in the WASH Atlas\textsuperscript{4}. However, it is worth noting that the information captured in the WASH Atlas is not solely the activities or achievements of the cluster members; it includes all interventions by WASH actors in the country, including non-members of the cluster.

\textit{Step 3.} The third step involves the maintenance of the process. The process of collaboration takes time to establish and it is deemed necessary to have some short-term successes to motivate members and keep them at the table. The WASH cluster was established in 2008, so it has been in operation for more than 5 years, and the members were and are kept at the table by the benefits they obtain. The semi-structured interviews revealed that these benefits include improved access to resources, both financial and material; capacity-building; and knowledge-sharing.

Since most of the cluster members are NGOs, they mainly rely on funded projects and thus they appreciate the WASH cluster forum, which gives them access to potential project funders. One of the respondents confirmed

\begin{quote}
\textit{we even get resources from the cluster when there are no emergencies to keep stock of materials such as NFI, water jerry cans, water treatment tablets, ORS, IEC materials. It is something we didn’t do before as an organization, to just buy materials that we don’t know when we are going to use them.}
\end{quote}

This has enabled them to respond to WASH emergencies within 24 hours since they now keep stocks of materials in anticipation of emergencies.

Furthermore, the members gain knowledge and build their capacity in different aspects of WASH. This is enhanced through training workshops or through partnership with other members during project execution. Moreover, some partners reported that the cluster enhanced their experience by attending learning workshops in other countries especially before piloting new technologies. The WASH cluster is also an information and experience-sharing platform. During interviews, the members acknowledged that the cluster gives them access to information that is relevant to their work and this keeps them updated with activities going on in the country or even in other countries. The majority of the respondents (94\%) agreed that the collaborative way of problem-solving is better than solving problems as a single organization or ministry.

\textit{Step 4.} The final step of the collaborative pathway is the resolution of the problem. It is the stage during which the objective of the establishment of collaboration is achieved although this may not be 100\% achievement but rather attainment of a good portion of the objective. For the WASH cluster, the efforts and activities carried out by members have succeeded in benefiting both the water sector and the population of the country, contributing to a reduction in outbreaks of water-related diseases and the revival of the water sector. The WASH cluster partners play a role in WASH advocacy and indirectly influence legislation through recommendations and the sharing of ideas with policy-makers and decision-makers. The cluster has contributed to the development of national documents, which include:


• National Definitions of Access to WASH;
• National Water Policy (still to be approved at the time of writing).

The WASH cluster has promoted information management and sharing in the sector, which led to the production of the WASH Atlas. This improved WASH database management and reduced duplication of efforts, thus improving the planning and implementation of programmes. Database management and the dissemination of information have facilitated the geographical spread of interventions to populations in need. The WASH cluster has provided a platform where researchers can also share their technological experiences. The National Institute of Health Research, which is a member of the cluster, is a national centre for research, training and service in the fields of disease control, biomedicine and public health. The institution is also involved in the research and initiation of WASH technologies and provides technical expertise to the government. Being part of the cluster facilitates the institution’s connection to organizations that are implementers of programmes on the ground, thus giving the opportunity to test new technologies before approval for piloting.

As the cluster was meant for WASH emergency responses, to contain diseases such as cholera, typhoid and dysentery, its efforts or interventions were targeted at reducing disease outbreaks and saving people’s lives. It is suggested that the efforts of the cluster, together with those of the government, have helped to significantly contain water-related diseases, especially cholera. The reduction in frequency of severe disease outbreaks is supported by the findings of a study by Mugadza (2012) in which data collected from the Ministry of Health and Child Welfare confirmed a significant decrease in diarrhoeal cases, which dropped from 5,809 in 2008 to 2,534 in 2011 (see Figure 4) in one of the districts where NGOs operate and who are also cluster members.

This reduction in disease outbreaks cannot be attributed to WASH cluster interventions alone since there are also other WASH actors (who are non-members of the cluster) operating in the same district. However, although the decrease cannot be attributed solely to the existence of the WASH cluster, it is significant that the establishment and operation of the cluster coincided with a decreasing number of disease outbreaks in the country.

Globally, urban WASH is an area with limited guidelines and evidence of appropriate implementation. The WASH cluster has been significantly interacting with urban environments and communities since the response to cholera of 2008/09 and some lessons can be derived from their activities. It is through the WASH cluster emergency responses that water sources such as boreholes were drilled in urban areas to

![Fig. 4. Disease outbreak. Source: Ministry of Health and Child Welfare – Seke District.](https://iwaponline.com/wp/article-pdf/17/2/370/405164/017020370.pdf)
supplement the municipal water although maintenance and repair of these boreholes present a challenge. As borehole water is free, there is no revenue generated from it for maintenance and repair. Although the responsibility for the boreholes was handed over to city councils, there is no budget set aside for borehole repair in cities and towns. In addition, in the past it was assumed that the urban populations were aware of hygiene issues, therefore little attention was given to that aspect. However, it became apparent that they also require education of this sort, and guidelines for Urban Hygiene Promotion were developed.

Overall, the WASH cluster has followed the sequential steps of Reilly’s collaborative pathway. However, it should be noted that the steps cannot be distinctly separated, but rather, they overlap. For instance, Step 3 regarding maintenance of stakeholders at the table continues until the resolution of the problem.

**F4: Empirical investigations on collaboration require further development**

The methodology used, especially the face-to-face, semi-structured interviews, was useful in digging deeper into the case of the WASH cluster. Much of the information was obtained through interviews and most of the respondents were keen to share information about the cluster and WASH situation in the country. The focus group discussions gave insights into the operation of the cluster at a provincial level. Moreover, attending the WASH cluster meeting and the workshops was important in getting to understand the cluster better as these settings were not set up for research but were the natural settings for the cluster. The possibility of preparation in advance for responses to questions from researchers was overcome as members were interacting in a natural way. This helped to gather more realistic information and triangulate with data collected during the interviews and focus group discussions.

In fact, the challenge with the methodology was the failure to isolate the effects of the collaborative efforts from contributions by other actors. The methodology used could not separate the interventions by the cluster partners from interventions by other WASH actors in the country. As noted in the data capturing process, the accomplishments are recorded as achievements of the water sector attained by all WASH actors who are active in the country. As such, the level of impacts of the WASH cluster could not be distinctly separated. Besides, some of the achievements cannot be confidently attributed to the efforts of the WASH cluster even though there might be a link. An example is provided by the decrease in disease outbreaks. From the literature it is noted that there is a link between access to water and sanitation facilities and deaths due to water-related diseases. However, there is no scientific evidence of the link between WASH and health; they are just inferences. Thus, the decline in disease outbreaks cannot be definitely attributed to the efforts of the cluster.

In summary, the qualitative method of research was useful to understand the functionality and the outcomes of the WASH cluster although there were some challenges with documented data that did not distinctly separate its efforts from those of other actors.

3. **Discussion**

The research findings indicate that the case of the Zimbabwean emergency WASH cluster confirms the validity of the analytical framework that was constructed based on the findings from the literature on collaboration.
3.1. Specific success factors in collaboration

Several success factors were considered in this process of collaboration of WASH actors. As noted in the literature, the involvement of relevant stakeholders is of paramount importance in order to realize the success of collaboration. The WASH cluster worked with relevant government departments. Besides, the approach did not come up with completely new structures but fitted into already existing government structures. This integration of the cluster with the government departments, as also witnessed in Uganda (Global WASH Cluster, 2009), fostered buy-in and the establishment of an effective working relationship with the government and hence acceptance of the approach in the country. This created a good working environment for the partners.

The decentralization of the WASH cluster to the provincial level, as noted by Ansari & Montague-Brown (2010), facilitated high-quality cluster coverage to affected areas and also promoted capacity-building, awareness and understanding of activities through joint exercises. Since these sub-national clusters are close to the operational activities in districts and communities, they have more chance of understanding the challenges and needs on the ground, thus promoting a valuable emergency response nationwide.

Among the major problems faced by WASH clusters, Ansari & Montague-Brown (2010) noted lack of participation as being one, and this was also evidenced in the Zimbabwean case. Lack of participation is thought to be due to three factors: reduced funding, the non-governmental status of the provincial focal agencies, and the voluntary nature of the cluster approach. The funding for the emergency WASH response was reduced as emergencies significantly declined in the country. Furthermore, the focal agencies are mostly international organizations and because of that, as well as the lack of an instrument to encourage participation, the agencies cannot push the partners to participate. The suggestion was that if the focal agency’s responsibility was given to the government instead of NGOs, this could provide more chance for the partners to respond better since the government is thought to have enough power to attract partners even without pushing them. It is, however, important to note that, for this approach to be sustainable, the government needs adequate sources of funding to maintain the collaboration.

Sub-division of the cluster into steering groups facilitated inclusion of key partners at critical positions and also power-sharing, which is key when organizations are working together (Huxham & Vangen, 2009). Although there was no clear indication of conflicting groups in the WASH cluster during the data collection, sensitive issues such as the selection of proposals for funding were viewed as unjust and biased as this was done by some players who also had interests in the funds. This has the potential for weakening trust and transparency among the group members, which are important factors for success (Horwath & Morrison, 2007; Van Dijk & Trienekens, 2012). Despite the challenges of sub-division, the categorization of partners is believed to help collaboration to move forward. London (1995) supports this idea, stating that collaboration works best in small groups and often breaks down if the group is too large.

3.2. Specific formats of collaboration

We noted that the cluster was once an informal group and is now a more formalized group. However, this does not mean that it evolved from the most informal way of working together, which is cooperation, on Sandfort & Milward’s (2007) collaboration continuum. From the information gathered during the study, it was found that there were some structural and functional adjustments of the working group when it was transformed to a cluster, but the scope was largely the same. Using Keast &
Mandell’s (2011) characteristics of collaborative arrangement (see Table 1), some of the characteristics of the cluster fit in the coordination segment; the power remains with the organizations and in some cases they implement projects jointly. These are the characteristics of coordination. However, the relational period was 5 years (at the time of the research) and in most cases they pooled resources for emergency responses, which are the characteristics described for collaborative arrangement.

Thus, the WASH cluster could be classified as operating in both the coordination and collaboration segments of the continuum and even going beyond to the service integration of Sandfort & Milward (2007). However, looking at the transformation of the cluster from the working group, there is no clear evolution since the mode of work is largely the same. Thus, it could be said that the collaborative relationships cannot easily be distinguished in instances where the differences are hard to separate between one form of arrangement and another.

3.3. Specific steps in collaboration

The processes of WASH cluster establishment and operation fit into the collaborative pathway developed by Reilly (2001). A large number of agencies were involved in WASH interventions in the country prior to 2008 and in order to coordinate these efforts and to maximize the benefits for the affected population, a working group was formed, and organizations started working together, with their activities coordinated. This fits with the identification, formation and implementation steps of Reilly’s pathway. The cluster offered a number of benefits to member agencies, which kept them at the table, thus maintaining the collaboration. The end result of their work was a reduction in the duplication of efforts, and improved coordination and information management. These interventions are believed to have contributed to a reduction in the incidence of water-related diseases. However, as pointed out earlier, this is an inference, since the reduction of disease outbreaks cannot be attributed directly to the efforts of the cluster. It was, however, noted that the establishment and operation of the cluster did coincide with the decreasing number of disease outbreaks. Thus, the objective of establishment of the cluster was achieved with the resolution of the problem, although there is still a need to ensure sustainability of the efforts by following up with a developmental response for complete sector recovery.

3.4. Specific research methodology for studying collaboration

Despite its effectiveness in problem-solving, it is worth noting that the process of collaboration is still an issue that has some challenges. The methodology of assessing collaborative efforts poses challenges in many instances and researchers are yet to find a method for evaluation of collaborative outcomes. As evidenced in this research, the WASH sector achievements were due to a combination of efforts from both members and non-members of the WASH cluster. Thus, the evaluation of collaborative efforts still requires further attention.

4. Conclusions

The outcomes of the research indicated that the analytical framework based on the findings by other authors in the field of collaboration is largely applicable in the WASH sector. The sector is facing difficulties, and the efforts of the government and WASH actors in the country are helping to keep
water-related diseases under control and save people’s lives. The mandate of the WASH cluster provides a short-term solution to the problems of WASH in the country and this has provided a basis for developmental interventions in order to provide a complete recovery of the sector and resolve the root cause of the problems, which is believed to be the collapsing infrastructure. The WASH cluster could consider expanding its mandate so that it responds to both emergencies and developmental WASH issues or include an area to advocate for sector investment and development to enhance complete sector recovery.

The lessons learned in the field of collaboration also apply in the area of water and sanitation. The process of collaboration may not necessarily evolve from an informal to formal arrangement; it depends on the choice of the members of the group and it can start and operate at the most formal level without starting from the lowest level (which is cooperation, according to Sandfort & Milward’s (2007) collaboration continuum).

It was noted that the process of collaboration follows sequential steps, as derived from Reilly (2001). However, the steps may not be distinctly separate and may overlap. For instance, the maintenance and resolution steps overlap. The interim successes that motivate partners to come to the table will continue up to the resolution stage. Thus, the steps cannot be noticeably separated.

There is no doubt that collaborative action for service delivery has benefits over provision by a single sector or organization. However, as Rosenbaum (2006) states, collaboration is not a formula to successfully deliver public services and is not appreciated in all situations. It needs to be implemented for problems that require the working together of organizations for it to yield desirable results. Principles of collaboration need to be taken into consideration and adjusted to suit the context in which the collaboration process is operating. The increase of collaboration in different nations across the world is an indication of the desirable benefits obtained from it, for which researchers need to find a methodology to single out how to measure its effectiveness.

In addition to its validation of the analytical framework, this research found that inasmuch as prominent leaders enhance collaboration, active involvement and leadership from the government can promote sustainability of the collaborative approach to problem-solving when enough resources are made available. In most instances the operation of NGO partners is project-based, and hence of a short-term nature. Thus, adequate resource mobilization and establishment of an instrument to encourage participation of members are vital for attractive collaboration results.

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