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Factors that Contribute to Successful Collective Action for Sustainable Water and Sanitation Development

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FACTORS THAT CONTRIBUTE TO SUCCESSFUL COLLECTIVE ACTION FOR SUSTAINABLE WATER AND SANITATION DEVELOPMENT

ABSTRACT

Complex problems require the coordinated and collective action of diverse sets of stakeholders; approaches seeking to strengthen this collective action have been established largely around environmental resource management in westernized countries. Recently, ‘collective action approaches’ have been proposed to deal with complex issues in lower and middle income country contexts for sustainably managing water and sanitation infrastructure. Yet, we know little about the transferability of these approaches across cultures and economies and what factors are needed to successfully enable action; while many frameworks build upon a similar foundation and contain similar elements and factors that contributed to their success, no study to date has identified a complete list of factors for collective action. As such, this paper identified a set of important factors from literature and interviews that are hypothesized to drive collective action, serving as a first step for synthesizing frameworks for future comparative analysis.

KEYWORDS

Collective action, Water and Sanitation, Low and Middle Income Countries

INTRODUCTION

Global development agencies and donors are reorienting their policies and strategies to promote programs that strengthen a country’s ability to address its development challenges. Particularly complex development challenges, such as providing reliable and safe water and sanitation services to all citizens, cannot be addressed by a single entity. Rather, solving them requires the collective input, commitment, and action from national governments, local government agencies, civil society organizations, and private sector throughout the process of identifying, planning, funding, and coordinating actions as a group.

Implementing organizations are increasingly using approaches designed to strengthen the coordination and partnership of local actors to form a coalition that collectively engages in targeted actions to achieve a development outcome. Referred to throughout this paper as ‘*collective action approaches*’, these approaches can require many steps, such as engaging key local actors in regular meetings, building consensus toward a shared learning and action agenda, and translating that agenda into synergized results (Ansell and Gash 2007; Kania et al. 2011; Ostrom 2000). Yet, the theory behind collective action work largely relies and builds on a significant amount of existing guidance for gathering diverse stakeholder groups in contexts of environment and resource management in the United States and Europe. Thus, the knowledge base for how these approaches can apply to sustainable water and sanitation development is limited in two ways. First, contexts in Low and Middle Income Countries (LMICs) are starkly different than those in the High Income Countries, both in institutional and political structures and processes as well as donor-program requirements. Second,

group dynamics for individuals using an environmental resource may be different from groups of organizations and agencies that play a role in managing that resource or service. Thus, as implementers begin to translate and adapt these collective action approaches to LMIC contexts, there is a need to determine what conditions and factors need to be added, adapted, or deleted from the original foundations in which they were based.

Amidst the many frameworks that exist – though only a few have started to be applied to water, sanitation, and hygiene contexts with limited application in LMIC contexts – all tout different sets of factors that contributed to success. A leading framework in the work of collective action is the Collective Impact framework established by Kania and Kramer (2011) and their organization, FSG, a consulting firm created out of Harvard Business School. The Collective Impact framework cites five ‘principles’ that together enable a coalition—a group of stakeholders—to coordinate and align their actions, reinforce one another and produce a collective impact. These include: (i) establishing a dedicated organization to lead the coalition, (ii) a common agenda, (iii) a shared measurement system, (iv) constant communication, and (v) mutually reinforcing activities (Kania et al. 2011; Lynn et al. 2018). Yet, many other frameworks pose similar factors that contribute to successful collective action. Some factors partially contradict one another or pose trade-offs, for example, diversity of members represented brings greater creativity and inclusivity to the coalition (Ansell and Gash 2007; Warner 2016) but sometimes means the coalition cannot align values and interests and come to agreement on joint actions (Margerum 2011; Smits and Moriarty 2007). Frameworks also can implement similar ideas differently; Collective Impact calls for leadership in the form of a core ‘backbone organization’ to lead (Kania et al. 2011) while others called for leadership functions to be decentralized to members according to skills (Ansell and Gash 2007; Reid et al. 2014).

Further, some factors may be necessary but alone not sufficient to see desired results. Collective Impact cites the importance of members having a common agenda, but Collaborative Governance literature has found that a collaboration will fail if it has “a deep foundation of trust and shared values... [as long as an] alternative venues exists where stakeholders can pursue their goals unilaterally” (Ansell and Gash 2007 p. 553). Trust and shared values alone are not enough to bind a group together if they can pursue their goals individually.

It is unknown what factors are needed together to produce collective action and results, particularly in LMIC contexts; research is also needed about how factors combine to produce outcomes. Implementers, donors, and governments would benefit from a comprehensive comparison of cases in WASH that exhibit these factors to different extents; determining which sets of factors reliably lead to a coalition collectively taking actions, and in doing so, creating desired outcomes of self-reliance for WASH. Comprehensive guidance is needed that gathers, compares, and synthesizes learning across these uniquely adapted efforts, illuminating how different parts of a collective action approach can work together to contribute to its success. Thus, we ask: **what factors enable and hinder the success of a coalition taking collective actions for water, sanitation, and hygiene development outcomes?** Here, we consider ‘success’ as the group of actors taking actions collectively. This paper presents our initial work to establish a list of factors that have contributed to the success of collective action efforts. By synthesizing prior work and perspectives, future applications and

adaptations of collective action efforts for sustainable water and sanitation systems can be more targeted and effective. Thus, we end by proposing a data collection plan to be able to systematically compare cases of collective action for development outcomes in future analysis.

METHODS

To establish a list of factors that have contributed to the success of collective action efforts, we gathered relevant frameworks and guidance on collective action in the water, sanitation, and hygiene (WASH) field to synthesize factors hypothesized for collective action success. First, we sought to understand the frameworks that are currently being used to guide collective action efforts in the WASH field by searching through references of practitioners known to be using collective action approaches. This began with organizations that are partners on the USAID Sustainable WASH Systems Learning Partnership, including WaterSHED, IRC-WASH, and Tetra Tech, as well as an advisory board member FSG. After finding that practitioners in the WASH field primarily implement two frameworks, Collective Impact (FSG) and Learning Alliances (IRC-WASH), we saw the need to compare these with a wider set of frameworks in water-related fields. We searched for additional frameworks by asking practitioners in the WASH field for additional references and by searching Google and Google Scholar for water-related collective action. Rather than considering individual case studies, we focused on frameworks that synthesized learning across multiple cases to produce a consolidated set of factors that they found contributed to success across all sites. This resulted in six additional frameworks, for a total of 8 frameworks that incorporate learning from over 250 case studies, listed in Table 1. These frameworks were related to convening a group of stakeholders to take coordinated actions for complex environmental or water problems, including frameworks such as “collaborative governance” and “collaborative management”. In future work, we will complete a systematic review based on feedback on this initial set of factors.

Table 1. Collective action frameworks reviewed.

Framework	Description and Source	Sector
Learning Alliances	A structured process for innovation and scale-up across different institutional levels, disciplines, and actors, is largely applied by IRC WASH in the WASH sector. Smits and Moriarty (2007) poses some reflections across three cases of Learning Alliances.	Water, WASH
Collective Impact	A framework for enabling groups to work better together for lasting positive social impacts, largely applied in the U.S. and Europe in over 30 case studies (Hanleybrown et al. 2012; Kajenthira and Sion 2017; Kania et al. 2011; Kania and Kramer 2013; Lynn et al. 2018; Patscheke et al. 2014)	Education, health, agriculture, WASH
Multi-Stakeholder Partnerships for Integrated Water Management	A book and framework <i>Multi-Stakeholder Partnerships for Integrated Water Management</i> outlines 'design principles' for MSPs on page 45 (Warner 2016)	Integrated Water Resource Management
Water-related collective action	A framework adapted to the context of sustainable development of water services by the UN Global Compact (The CEO Water Mandate 2013).	Water
Collective action, original theory	The original theory as first established by economists to explain why individuals in a group will not act toward a collective interest, by (Olson 1965; Ostrom 1992, 2000, 2010).	Water resources, environment
Collaborative governance	A framework for groups collectively governing a service, first established by (Ansell and Gash 2007) and then further tested and applied in (Ansell and Gash 2018; Emerson et al. 2012; Emerson and Nabatchi 2015; Langridge and Ansell 2018; Ulibarri 2015; Ulibarri and Scott 2017).	Environment, service provision
Collaborative management and planning	A framework provided in a book by (Margerum 2011) that synthesizes findings from over 60 case studies on collaboration in natural resources, social services, and infrastructure planning	Environment
Platforms for Partnership	A framework by UKAid- (Reid et al. 2014), which studied nine cases in-depth that brought together local actors to partner for sustainable development and outlines the role of the private sector to do so.	Sustainable Development

The purpose of this paper is to propose a set of enabling factors that can be compared across cases in WASH. Most frameworks included in the review provided consolidated lists of ‘factors’, ‘design principles’, ‘conditions’, or ‘elements’ that were found to have enabled successful collective action. These will be referred to as ‘factors’ in this paper. With a range of 7 – 29 factors per framework, our review resulted in over 90 factors that had contributed to the success, many of which overlapped or were very similar. We then affinity-grouped these by similarities into a set of eleven factors. For example, the following factors were listed:

- “A Common Vision: of the desired future conditions in the river basin and the underlying values, beliefs and principles that will guide joint actions towards realising them” (Warner 2016).
- “Multiple stakeholders have different, often divergent interests, yet share a common interest around a particular topic. To stimulate their focus and

action, a clear objective, or even a vision and mission of the alliance is needed” (Smits and Moriarty 2007).

- “Shared partnership culture: Just as with any partnership, a complex, multi-stakeholder platform requires a strong overall vision around which diverse sectors can mobilize” (Reid et al. 2014).
- Common Agenda: “Collective Impact requires all participants to have a shared vision for change, one that includes a common understanding of the problem and a joint approach to solving it through agreed upon actions (Kania et al. 2011).
- “High-level, open-ended goals that allow partners to develop their own approaches as long as they follow the framework.... [they should] develop a shared theory of change, which is, in essence, a strategy for accomplishing the collective purpose and target goals” (Ansell and Gash 2007).

These, along with others, were combined and synthesized into the condition *Common Mission and Agenda: The coalition shares values, agrees upon a mission/vision, agrees about the core problem restricting the ability to reach that mission/vision, and agrees upon an agenda or strategy for solving that problem. Visioning, problem identification, and agenda-setting can be either broad or narrow in scope and can range from being decided prior to coalition formation to being fully deliberated by, and thus incorporate the diverse perspectives of, all members.*

Each factor and set of metrics that will be used to assess each factor, is detailed in the results section.

RESULTS

The following section summarizes the factors that resulted from the synthesis, discussions from experts on these factors held at a conference in March, and metrics for assessing each factor.

FACTORS THAT MAY CONTRIBUTE TO SUCCESSFUL COLLECTIVE ACTION

A preliminary set of eleven factors that have contributed to success in the reviewed frameworks include *Legitimate and Capable Leadership, Common Mission and Agenda, Member Relationships, Government Engagement, Data, Communication Processes, Incentives or Motivations to Engage, Internal Rules for Operating, Adaptation, Membership Balance, and Resources*. Taken from the eight frameworks, no single framework identified all eleven factors, but Collaborative Governance (Ansell and Gash 2007) which was based on 137 studies, identified ten of the eleven. However, even when multiple frameworks identified the same factor, each provided unique details and perspective on what that factor should contain. For example, within Leadership, some frameworks called for a strong, dedicated core set of individuals to lead as a ‘backbone organization’ (Kania et al. 2011) while others called for leadership functions to be decentralized to members according to skills (Ansell and Gash 2007). Decentralization may allow for members with convening power to host meetings and members with access to external funding to fund meetings. The definitions for each factor and the frameworks that identified them are listed in Table 2.

Table 2. Factors that have been found to influence collective action, listed from the most to least number of frameworks that identified the factor.

Factors	Frameworks identifying the factor
<p>Legitimate and Capable Leadership: The coalition has a leadership structure that is responsible and has the authority to govern. Leadership is accountable to members, representative of members, and seen as legitimate and capable by members. The leadership should be capable (has skills and dedicated funds) of performing functions, including guiding vision/ strategy, convening stakeholders, supporting alignment, building ownership, and mobilizing resources. Leadership roles can be centralized (one core structure that takes on all responsibility); partially decentralized (members can also be involved in setting the agenda, giving presentations, participating in action-teams, etc.) or fully decentralized (where roles are differentiated and assigned to specific members based on skills).</p>	<p>1, 3, 4, 5, 6, 7</p>
<p>Common Mission and Agenda: The coalition shares values, agrees upon a mission/vision, agrees about the core problem restricting the ability to reach that mission/vision, and agrees upon an agenda or strategy for solving that problem. Visioning, problem identification, and agenda-setting can be either broad or narrow in scope and can range from being decided prior to coalition formation to being fully deliberated by, and thus incorporate the diverse perspectives of, all members.</p>	<p>3, 4, 5, 6, 7, 8</p>
<p>Communication Processes: Internally, the coalition has processes in place to receive feedback from members but also facilitates member interaction and reciprocation, specifically across areas of expertise or training. Externally, the coalition has structures in place to engage diverse, broad external actors. The coalition is a trusted source of information.</p>	<p>2, 3, 4, 5, 6, 8</p>
<p>Member Relationships: Members know each other, trust each other, accept that others may have different perspectives, and see each other as credible and legitimate. Reciprocal relationships may be more important than only number of relationships.</p>	<p>2, 4, 5, 6, 7</p>
<p>Incentives or motivations to engage: Members have a reason to engage in the coalition, such as to gain credibility through the coalition, to alleviate external pressures, to honor internal commitments, to access resources, to gain knowledge, because they see that the coalition adds value, because they gain value early on in the process such as through ‘early wins’, or to access opportunities to have their voice heard and distribute power asymmetries.</p>	<p>3, 4, 5, 6, 7</p>
<p>Internal rules for operating: The coalition has established ground rules, which could include coalition scope, goals, roles, decision processes, time and resource commitments. There is guidance for what happens if some members do not follow the rules, such as conflict-resolution mechanisms. All members agree to the rules.</p>	<p>1, 2, 5, 6, 7</p>

<p>Adaptation: The coalition has reflected on their own collective action process and on their course of action to reach their goal, or has a plan in place to do so. They have the flexibility and ability to adapt their process or their strategy if they decided to do so, and the ability to adapt is established at the startup of the coalition.</p>	<p>2, 5, 6, 7, 8</p>
<p>Membership Balance: There is a range of diverse actors as members of the coalition, which represent all stakeholders in reaching the coalition mission/vision. The coalition intends to identify new diverse members to add as necessary. Overall, membership is stable with low turnover of members and member representatives.</p>	<p>4, 5, 7, 8</p>
<p>Resources: The coalition has sufficient resources, which are perceived to be fair by members, and there is a plan for how to continue to access resources over time. Resources include budget, time, technical support, logistical support, and skills for carrying out the collective action process (facilitation, administration, analysis, implementation, problem-identification, direction-setting).</p>	<p>5, 6, 7, 8</p>
<p>Data: The coalition has access to data about the problem they intend to solve and it has a plan to collect, or has collected, data to track progress toward these outcomes. The coalition has a plan to collect, or has collected, data about the collective action process itself. Data infrastructure exists for storing these data. All members are involved in gathering and analyzing these data, and the coalition uses these data for making decisions.</p>	<p>3, 5, 6</p>
<p>Government engagement: Government is engaged and involved as appropriate to the context.</p>	<p>3, 7, 8</p>
<p>Sources: 1 - Collective action, the original theory: (Olson 1965; Ostrom 1990, 1995, 2000) 2 - Collective action: UN Global Compact (The CEO Water Mandate 2013) 3 - Collective Impact: (Hanleybrown et al. 2012; Kajenthira and Sion 2017; Kania et al. 2011; Kania and Kramer 2013; Lynn et al. 2018; Patscheke et al. 2014) 4 - Collaborative management and planning: (Margerum 2011) 5 - Collaborative governance: (Ansell and Gash 2007; Emerson et al. 2012; Emerson and Nabatchi 2015; Langridge and Ansell 2018; Ulibarri 2015; Ulibarri and Scott 2017) 6 - Platforms for Partnerships – (Reid et al. 2014) 7 - IRC-WASH Learning Alliance - (Smits and Moriarty 2007) 8 - Multi-Stakeholder Platforms for Integrated Water Management, (Warner 2016)</p>	

EXPERT PRIORITIZATION

The synthesized factors represent eleven broad categories of what may be important in WASH collective action contexts. However, this is based upon the relative frequency of what frameworks they appeared in; for example, Legitimate and Capable Leadership was mentioned in six of the eight reviewed frameworks. Prioritization by experienced practitioners in the WASH sector is another method that could help pare down and focus the number of factors, particularly in the context of WASH in LMIC contexts.

A workshop titled “*Beyond Collaboration: learning from national and district-level collective action efforts in WASH*” was held in March 2019 at the IRC-WASH All Systems Go! Conference. The workshop focused on the application of varied factors for collective action and we passed out a one-page summary of the factors above for each participant. The end of the workshop allowed for a panel discussion about emergent gaps and challenges of implementation, and we took notes during the discussion. Two clear gaps emerged when applying these frameworks, which collate experiences from high income countries, to LMIC contexts and particularly WASH service provision: government engagement and data. These were not identified as ‘priorities’ per se, but rather factors that need further investigation based on the existing literature and documentation.

Government Engagement

In frameworks that were formed from experiences in the U.S. and Europe, the role that the government plays varies; sometimes coalitions are started by government agencies or programs and they are certainly included as a stakeholder when needed. However, in development contexts, government engagement is not only required but also must be navigated amidst inconsistent relationships between the national government and the donor’s country; non-democratic governing regimes; power inequalities and distances; colonial histories; and national priorities.

Data

In the High Income Countries, data access and security pose their own challenges, but there is generally adequate data surrounding the problem that a coalition seeks to solve. Thus, having access to reliable data is assumed. However, in WASH in LMIC contexts there is rarely enough data available about service levels and infrastructure functionality, and when data is available it is often unreliable or inconsistent across data sources. Thus, in the startup of a collective action effort, significant time and resources are required to understand the extent of the problem in the first place; baseline assessments have played a large role in allowing the coalition to have the data and evidence to discuss the problem and make informed decisions.

From presentations and discussions, additional areas of future investigation emerged around (a) whether collective action efforts need to continue indefinitely versus being able to be funded through donors for fixed-length funding cycles and (b) how different structures and roles for the leadership organization, including how to select the leaders, impact outcomes. Through a series of follow-up interviews and discussions, we seek to investigate these themes further [*to be completed in the next few months and will be in the final paper*].

MEASUREMENT

A common set of measures are needed to assess the extent to which each factor is present in a context, as only some frameworks provided metrics or scoring for the factors they listed. Further, each factor has varying aspects that could be measured, for example agreement on a common mission and agenda can include measures for if the coalition agreed on a common mission, on the problem that inhibits reaching that mission, on the agenda for addressing that problem, and on roles and responsibilities

for doing so A first draft of measures was developed solely using all the various aspects of a factor that were collated from the frameworks reviewed (Table 2).

Table 3. First draft of metrics for assessment of the extent to which factors are present.

Legitimate, capable leadership: Leadership has the ability to carry out facilitation and administrative functions. These are taken on by a dedicated backbone organization or shared among members. Leadership is accountable to, representative of, and seen as capable by members.

Measure	Sources
A leadership structure is established and given the responsibility and authority for governance and decision-making.	3
Structure should be non-rigid during initial phase of engaging core group of partners and co-developing its activities and approaches.	6
Leadership has capacity to lead, i.e. Dedicated funds and staff to perform functions, with knowledge and skills required to directly support partnerships.	3, 4, 5, 6
Leadership infrastructure coordinates and supports core initiative activities, for example, guides vision and strategy, convenes stakeholders, supports alignment and shared measurement practices, builds ownership, advances policy, and mobilizes resources	3
Leadership roles are differentiated and assigned to specific members; for example, a coalition may differentiate between the various leadership roles (organizer, funder, coordinator, mediator, strategic coordinator for guiding activities into learning process, etc.).	5, 7
Diversity of members set the agenda	5 (Ulibarri)
Diversity of members give presentations	5 (Ulibarri)
Diversity of members are assigned to action teams	5 (Ulibarri)
Those managing the platform is held accountable to members	6
Leadership is representative of the local actors and possibility of capture by elites is low	5
Members believe that the leadership has appropriate skills and credibility to perform its functions	3

Common Mission and Agenda: The coalition shares values and agrees upon a mission, the core problem underlying that mission, and an agenda or strategy for solving that problem.

Measure	Sources
Values, culture and beliefs are similar and have 'low heterogeneity'	4, 5, 6, 8
Agreed-upon goals or mission or vision of the coalition	6, 7, 8
Agreed-upon problem definition / understanding of the problem	3, 4, 5, 6, 7
Agreed-upon agenda or strategy for solving the agreed-upon problem	5
Agreed-upon agenda or strategy for solving the agreed-upon problem is kept high-level, open-ended	5
A diversity of actors contribute to problem definition and strategy for solving problem	5 (Ulibarri)
Problem is identified and strategy/ agenda decided prior to coalition formation, with ability for further definition after initial set of stakeholders are engaged	7

Member Relationships: Members know each other, trust each other, accept that others may have different perspectives, and see each other as credible and legitimate.

Measure	Sources
Established social networks; members know each other or have interacted outside the coalition	4
Understanding and acceptance that other perspectives exist and are valuable	5
Trust between members	2, 5
Credibility and legitimacy of others	2, 5
Connections are reciprocated with two-way communication, but not necessarily constant between all members. There could be concentrations of interactions with less overall involvement, but overall there is less tendency for a few actors to dominate.	5

Data: The coalition has access to data about the problem they intend to solve and the coalition itself. There is a plan to collect data to track progress toward these outcomes, and the coalition uses these data for making decisions.

Measure	Sources
The coalition has a well-designed data infrastructure for storing and reporting data	3
The coalition has established a set of agreed-upon indicators and data collection plan/methods to track progress toward its outcomes. The coalition has collected data to track progress toward its outcomes.	3, 5 6
There is a plan and/or set of agreed-upon indicators for collecting data about the coalition and collective action process itself, including leadership structure, or report back to the group on. The coalition has collected data on the collective action process, coalition, or leadership.	5, 6
All members are involved in aggregation, separation, and reassembly of data and information	5
Data and reports are available to members in a timely manner and of sufficient/usable quality	3,5
Data and evidence is used by the coalition for collective decisions	2, 5, 6
Data is used by individual members to make their own decisions and establish priorities, outside of the coalition	3

Government engagement: Government is engaged and involved as appropriate to the context.

Measure	Sources
Government is engaged often and early	3, 7
Government does not control decisions but is involved and supports coalition decisions	8

Communication Processes: The coalition has internal processes to receive feedback from members and facilitate member interaction. Additionally, the coalition has processes to engage diverse external stakeholders.

Measure	Sources
Structures facilitate diverse participation in discussion, negotiation, and dialogue across boundaries, i.e. between areas of expertise or training	4, 5, 6, 8
The coalition seeks to encourage reciprocal ties between members, i.e. members providing feedback to each other on reports or using data from each other.	5
Activities of the coalition and communication strategies and messages about decisions and actions of the coalition are transparent	2, 3
The coalition has structures and processes in place to inform and engage members; seek internal feedback from members, and foster communication between members. Face-to-face dialogue is used as appropriate	3, 5
The coalition is a trusted source of information to external and internal actors	4
The coalition has structures and processes in place to engage external actors.	3, 5 (Ulibarri)
Communication is wide-reaching and adapted to reach a broad audience of external actors	3, 6

Incentives or motivations to engage: Members have a reason to engage, e.g., to gain credibility, to alleviate external pressure, to honor internal commitments, to access resources, or to gain opportunities to have their voice heard.

Measure	Sources
Ongoing commitment, including shared ownership of the process	4, 5
Legitimacy, credibility of collective action group	5 (Ulibarri)

Intermediate, small outcomes or 'wins', early capacity building	3, 5, Case Knowledge
External pressures to engage	4
Members see the coalition as valuable. Value is well-defined and relevant	6
The coalition is attractive compared to other venues for solving the problem	4
Power distribution and asymmetry	4, 5, 7

Internal rules for operating: The coalition has established ground rules, which could include scope, goals, roles, decision processes, and time and resource commitments. All members agree to the rules.

Measure	Sources
Ground rules, bylaws, MOUs, exist - but not so strict that it allows some members to control others	5 (Ulibarri), 5
All parties involved clearly understand and agree to the rules, including scope, goals, roles, decision processes, and time and resource commitments of the engagement	2
Guidance for non-compliance, including conflict resolution mechanisms for when non-compliance occurs	1, 5

Adaptation: The coalition has flexibility to adapt their processes or strategy as needed. Members are able and willing to change their ways of working.

Measure	Sources
Procedures or plans to reflect on and adapt collective action process	5 (Ulibarri)
Strategies and plans of action have the ability to change and adapt after analysis of data/information	5, 6
Evidence of altered collective action process based on reflection or altered strategies or plans of action after change in information or context.	5, 8
Expectations for the need for flexibility are established at the outset	2
Governance strategies or leadership structures can adapt	6
Members are willing and able to change the way they think about and act on an issue. Members may need to unlearn practices or ways of working.	7

Membership Balance: The coalition represents all stakeholders. Membership is stable with low turnover of members and member representatives.

Measure	Sources
Range of actors attend meetings	4, 5 (Ulibarri)
Plan or mechanism to identify new diverse members	5 (Ulibarri)
Diverse social, cultural, and economic elements of the population are fairly represented and involved as members in decision making and throughout the collaborative process	5, 8
Plan for managing conflicting interests	7
Stable membership, low turnover of member actors (organizations, agencies, etc.)	5
Low turnover of individuals representing each member	5

Resources: The coalition has sufficient resources (budget, time, technical support, logistical support, and skills) to carry out the collective action process and there is a plan for how to continually access resources over time.

Measure	Sources
Coalition has sufficient resources (budget, funding, time, technical support, logistical support, skills) for carrying out process (facilitation, administration, analysis, implementation, problem-identification, direction-setting)	5, 7
Resources are perceived to be fair by members	5
Adequate budget support and time commitment to support processes.	5
The coalition has a plan to access and generate sufficient resources over its lifetime	6

Sources:

- 1 - Collective action, the original theory: (Olson 1965; Ostrom 1990, 1995, 2000)
- 2 - Collective action: UN Global Compact (The CEO Water Mandate 2013)
- 3 - Collective Impact: (Hanleybrown et al. 2012; Kajenthira and Sion 2017; Kania et al. 2011; Kania and Kramer 2013; Lynn et al. 2018; Patscheke et al. 2014)
- 4 - Collaborative management and planning: (Margerum 2011)
- 5 - Collaborative governance: (Ansell and Gash 2007; Emerson et al. 2012; Emerson and Nabatchi 2015; Langridge and Ansell 2018; Ulibarri 2015; Ulibarri and Scott 2017)
- 6 - Platforms for Partnerships – (Reid et al. 2014)
- 7 - IRC-WASH Learning Alliance - (Smits and Moriarty 2007)
- 8 - Multi-Stakeholder Platforms for Integrated Water Management, (Warner 2016)

FUTURE WORK

In future work, practitioners with experience in collective action efforts will review the factors, metrics, and calibration before finalizing and creating a research protocol that assesses each factor within each case. Calibration guides for factors will enable consistent assignment of values to cases that determine the degree to which a factor is ‘in’ the set, in this case, displaying the hypothesized ‘optimal’ situation. For example, for a factor such as ‘agreement on a common vision’ to occur amongst a group of diverse stakeholders, some frameworks showed that complete agreement without deliberation and compromise may not be as beneficial as a vision that represents all perspectives but to which not everyone fully agrees.

Based upon the calibration guides, we will analyse and assign scores for each factor in each of the 10-15 cases of collective action in WASH. For each case, data will be collected and reviewed to determine the extent to which each factor is present based on its associated measures. Some measures can be assessed through existing project documentation, such as meeting reports of the coalition or work plans of the implementing organization. Other measures can be evaluated through interviews with the implementing organization, coalition leadership, or coalition members. When possible, multiple data sources will be used for triangulation.

Not enough cases of collective action in WASH contexts exist to properly compare using large-N statistical methods, nor do statistical methods allow for nuanced case knowledge to be considered to the depth necessary for these cases. The method of Qualitative Comparative Analysis (QCA) lies nicely between small-N case studies and large-N statistical analyses; it requires in-depth case knowledge to assign quantitative scores to factors for each case and ultimately compare cases relative to one another. Originally developed by Charles Ragin (1987), the QCA method is increasingly used in fields of applied science such as rural water, sanitation, and disaster recovery. Yet, unlike these QCA applications, in which the factors are relatively well-known and cases exist in many contexts around the globe, collective action efforts have factors that are understudied, ambiguous, and have few cases of application. The work presented in this paper fills this gap by generating a set of factors that can be used in a future comparative analysis.

CONCLUSIONS

While many frameworks build upon a similar foundation and contain similar elements and factors that contributed to their success, no study to date has identified a complete list of factors for collective action success. This paper identified a set of important

factors that could drive collection action, in so serving as a first step for synthesis of frameworks and as a setup for future comparative analysis that will aim to determine how collective action is achieved.

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REFERENCES

- Ansell, C., and Gash, A. (2007). "Collaborative Governance in Theory and Practice." *Journal of Public Administration Research and Theory*, 18(4), 543–571.
- Ansell, C., and Gash, A. (2018). "Collaborative Platforms as a Governance Strategy." *Journal of Public Administration Research and Theory*, 28(1), 16–32.
- Emerson, K., and Nabatchi, T. (2015). "Evaluating the Productivity of Collaborative Governance Regimes: A Performance Matrix." *Public Performance & Management Review*, 38(4), 717–747.
- Emerson, K., Nabatchi, T., and Balogh, S. (2012). "An Integrative Framework for Collaborative Governance." *Journal of Public Administration Research and Theory*, 22(1), 1–29.
- Hanleybrown, F., Kania, J., and Kramer, M. (2012). "Channeling Change: Making Collective Impact Work." Stanford social innovation review.
- Kajenthira, A., and Sion, P. (2017). "Collective Impact Without Borders." *Stanford Social Innovation Review*, <https://ssir.org/articles/entry/collective_impact_without_borders>.
- Kania, J., and Kramer, M. (2013). "Embracing emergence: How collective impact addresses complexity." Stanford social innovation review.
- Kania, J., Kramer, M., and others. (2011). "Collective Impact." *Stanford Social Innovation Review*, Winter 2011, 36–41.
- Langridge, R., and Ansell, C. (2018). "Comparative Analysis of Institutions to Govern the Groundwater Commons in California." *Water Alternatives*, 11(3), 481–510.
- Lynn, J., Gase, L., Roos, J., Oppenheimer, S., Dane, A., Stachowiak, S., Akey, T., Beyers, J., Chew, A., Habtemariam, E., Gutierrez, J., and Orians, C. (2018). *When Collective Impact has an Impact: A Cross-Site Study of 25 Collective Impact Initiatives*. Spark Policy Institute, ORS Impact.
- Margerum, R. (2011). *Beyond Consensus*. MIT Press.
- Olson, M. (1965). *The logic of collective action*. Harvard University Press, Cambridge.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press, Cambridge [England].
- Ostrom, E. (1992). *Crafting institutions for self-governing irrigation systems*. ICS Press ; Distributed to the trade by National Book Network, San Francisco, Calif. : Lanham, Md.
- Ostrom, E. (1995). *Understanding Institutional Diversity*. Princeton University Press, Princeton, NJ.
- Ostrom, E. (2000). "Collective Action and the Evolution of Social Norms." *Journal of Economic Perspectives*, 14(3), 137–158.
- Ostrom, E. (2010). "Analyzing collective action: Analyzing collective action." *Agricultural Economics*, 41, 155–166.
- Patscheke, S., Barmettler, A., Herman, L., Overdyke, S., and Pfitzer, M. (2014). "Shaping Global Partnerships for a Post-2015 World." *Stanford Social Innovation Review*, <https://ssir.org/articles/entry/shaping_global_partnerships_for_a_post_2015_world>.

- Reid, S., Hayes, J. P., and Stibbe, D. (2014). *Platforms for Partnership: Emerging good practice to systematically engage business as a partner in development*. The Partnering Initiative, Oxford, 44.
- Smits, S., and Moriarty, P. (2007). *Learning alliances: scaling up innovations in water, sanitation and hygiene*. IRC International Water and Sanitation Centre, Delft.
- The CEO Water Mandate. (2013). *Guide to Water-Related Collective Action*. UN Global Compact, 56.
- Ulibarri, N. (2015). "Tracing Process to Performance of Collaborative Governance: A Comparative Case Study of Federal Hydropower Licensing: Ulibarri: A Comparative Case Study of Federal Hydropower Licensing." *Policy Studies Journal*, 43(2), 283–308.
- Ulibarri, N., and Scott, T. A. (2017). "Linking Network Structure to Collaborative Governance." *Journal of Public Administration Research and Theory*, 27(1), 163–181.
- Warner, J. (Ed.). (2016). *Multi-Stakeholder Platforms for Integrated Water Management*. Routledge.