Solving Problems in Public Service Delivery

Pathways to resolution when citizens identify problems in Kenya, Afghanistan, and Palestine

Integrity Action Research Report

July 2021

Contributors

Authors: Daniel Silver, Enrica Lorusso, David Crane, Kay Lau and Chermaine Tay

Research support: Shadi Zatara (Palestine), and Isaack Otieno (Kenya) and Anonymous (Afghanistan)

Acknowledgements

Integrity Action

Integrity Action is an independent non-governmental organisation.
Company registration number: 4884328 (England and Wales)
Charity registration number: 1120927
info@integrityaction.org
www.integrityaction.org

Cover photo: Citizens monitoring a water point (image courtesy of Integrity Action)

Citation: Silver, D., Lorusso, E., Crane, D., Lau, K. and Tay, C. (2021) Solving Problems in Public Service Delivery: Pathways to resolution when citizens identify problems in Kenya, Afghanistan and Palestine; Integrity Action research report.

Executive summary

Context

Social accountability mechanisms aim to improve service provision, governance, and institutional performance by increasing citizenship engagement and improving the public responsiveness of institutions and service providers (Fox, 2015). Integrity Action works to help catalyse this process by engaging with citizens, institutions (duty-bearers), and systems so that citizens can successfully demand integrity from the institutions they rely on. However, it is often the case that even when citizens are empowered to engage in these processes, institutions do not consistently respond to these grievances, and problems remain unsolved.

This research study, commissioned by Integrity Action, investigates the factors and mechanisms that lead to the resolution of citizen-identified problems, with a focus on public infrastructure projects. Understanding that multiple factors will cause duty-bearers to respond to citizens, this study adopts a broad conceptualisation of equifinality, seeking to determine which combination of factors often lead to problem resolution and which factors are barriers for change. As such, the scope of the research is inward looking, investigating the relationship between the mechanisms implemented by Integrity Action to catalyse social accountability effectiveness and other contextual factors.

Methodology

To assess this complex process of causation, the study uses qualitative comparative analysis (QCA). QCA is a method that provides a logical way of establishing causality with in-depth case study data (Ragin, 2000). It compares factors that are applicable across a number of different cases in order to identify which configuration of conditions most likely to achieve the desired outcome (problem resolution). Specific to this study, cases represent a problem that has been resolved and a problem that remains outstanding.

In total, 32 cases were included across three countries: **Afghanistan** (8 cases), **Kenya** (16 cases) and **Palestine** (8 cases) − 16 problems solved and 16 problems unsolved. The cases were predominantly infrastructure projects taking place at community level, such as schools, water supplies, and solar energy systems. **Out of the 32 cases, 29 cases related to infrastructure projects:** 10 cases related to the construction of schools, 10 cases related to issues regarding community infrastructure projects (e.g. accessibility or issues with the timing of the work), 4 cases related to the construction of water supply for communities, and 5 cases related to issues with water and sanitation infrastructure in schools. The remaining three cases related to schools' lack of resources.

As the scope of this study is focused on the factors that drive duty-bearers' responsiveness to citizen-identified problems, **the Capability, Opportunity, Motivation and Behaviour (COM-B) model has been adopted** as a framework to identify and organise factors that lead to behaviour change. This was further informed by evidence of influencing factors in Integrity Action's programme documentation and wider academic literature. For the full list of factors included and their corresponding definitions and hypotheses, see Section 3.1.3.

Through in-depth interviews with citizen monitors related to service delivery projects (infrastructure, education, and water and sanitation projects) and relevant duty-bearers responsible for fixing problems (principal teachers, government administrative representatives, mayors, and service providers), we asked stakeholders to provide an assessment as to how the problem was solved and which factors contributed to problem resolution. If the problem remained outstanding, stakeholders were asked to provide an assessment regarding what factors hindered this process.

Using QCA, we were then able to generate combinations of factors – or pathways – that are sufficient to achieve the positive outcome and undertake within-case analysis to assess the relevance of these pathways across the set of cases included. For further details regarding our methodology, see Section 3 and Annex 1 of this report.

ECORYS | Answering tomorrow's challenges today

Findings

Through QCA, three solutions were generated that include several pathways of factors deemed sufficient to cause the outcome. The parsimonious solution was chosen; within-case analysis determined that the pathways present within this solution had the most explanatory power. The parsimonious solution is also the most reduced function possible, meaning it is the simplest causal solution that leads to the outcome, therefore, providing the most salient answers to Integrity Action's research objectives.

Through further within-case analysis of data, we identified two parsimonious pathways as relevant to the majority of cases: **Mutual Trust AND Human Capacity** and **Informed Citizen-led Action AND Human Capacity**. The definitions and hypotheses provided for all these factors are provided in the table below (see table 3.1 for definitions and hypotheses for all factors):

Factor	Definition	Hypothesis
Mutual trust	Levels of trust between citizens and duty-bearers.	Existence of trust between citizens and duty-bearers will enable open discussions and the opportunity to engage in service delivery.
Human capacity	Duty-bearers possessing adequate human capacity to engage with citizens. Duty-bearers understanding priorities of citizens.	Adequate human capacity increases likelihood that duty-bearers will respond to citizen voice.
Informed citizen-led action	Citizen-led action that is informed and targeted.	Information of specific entitlements, legislation and rights will impact the action citizens take and the motivation of duty-bearers to respond.

- **Mutual Trust AND Human Capacity is a highly relevant pathway leading to problem resolution.** When monitors and duty-bearers trust each other, both collaborate to find a solution to the problem. The presence of human capacity helps to build mutual trust further and enables meaningful engagement. When a duty-bearer has capacity to engage with the monitors, and the monitors trust that duty-bearers will work to achieve positive solutions, a partnership is formed that can lead to problem resolution.
- **Informed Citizen-led Action AND Human Capacity is also a relevant pathway leading to problem resolution.** Once a problem is raised by a monitor using accurate information, human capacity is needed for duty-bearers to meaningfully engage with monitors and find a resolution. Both factors work very closely together in cases to resolve problems.

Both pathways were found to be catalytic as they enable other important factors that work together to achieve problem resolution. Monitors require access to accurate information to raise a problem, and a duty-bearer's human capacity to engage with the monitors will help find a solution to the problem. Often, when duty-bearers have human capacity, mutual trust is built. Through this trust, collaboration is enabled; the monitors and duty-bearer work together to find a solution and engage with other relevant stakeholders. Where mutual trust and collaboration are present, there are often social incentives for the duty-bearer to respond to monitors and work to conserve their close relationship and to identify solutions.

This indicates that a solid and trustworthy relationship between the monitors and the duty-bearer enables non-confrontational engagement and encourages the monitors to rely on the human capacity of the duty-bearer to engage in the process of problem resolution. The existence of well-established participatory mechanisms helps catalyse problem resolution, especially where monitors could use these platforms to discuss problems openly and based on mutual trust.

We also found that additional factors that were not assessed were also important for problem resolution. **Monitors'** perception and knowledge of who is responsible for both protecting citizens' rights and entitlements and

solving the problems is a clear factor affecting problem resolution. In cases where monitors did not know who is directly responsible for solving problems, and where governance systems did not enable clear lines of accountability and responsibility, problem resolution was not likely to occur.

The complexity, scale, and framing of the problem were also found to impact problem resolution.

- Complexity of problem: Some duty-bearers noted that certain problems require complex solutions, therefore needing a longer timeframe to solve. Certain factors can help to solve problems, such as mutual trust and human capacity, but achieving the outcome can often require including a variety of relevant stakeholders due to complex situations and, therefore, take a longer timeframe.
- Scale of the problem: Some problems were seen as smaller, localised problems and, therefore, easier to solve than others, which positively affected the outcome. Problems that are localised and straightforward are easy to identify, and the configurations of factors identified often lead to problem resolution (mutual trust and human capacity). Many of these local problems were caused directly by the subcontractor trying to cut corners and did not involve other stakeholders. Therefore, the monitors and duty-bearers were able to work together to intervene, pressure the subcontractor, and solve the problem.
- Where the scale of the problem is much larger, problems tend to remain unsolved: In most cases, the duty-bearer did not need to use financial resources to solve the issue as the problems were seen as localised issues that did not need additional finances and could be fixed with little external intervention. In some cases, however, problems were at such a large scale they went beyond the duty-bearers' budget availability and were not priorities for the government to fix.
- Framing of the problem: Monitors noted that duty-bearers would be more responsive to finding a solution depending on how the problem was framed. If problems were communicated as urgent, and it was clearly demonstrated to the duty-bearer why it was necessary for the problem to be solved in a short timeframe, then problem resolution was more likely.

Learning for social accountability initiatives

1. Integrity Action's approach is centred on three components that form the basis of its activities and mechanisms to help drive social accountability effectiveness: **incentives** to act with, and demand, integrity; **mutual trust**; and **information** that gives citizens leverage. The findings from this study support this approach and suggest that citizens that possess accurate information regarding service delivery are more likely to be properly equipped to initially raise a problem with duty-bearers. Additionally, the cases of the study highlight that the proximity of the duty-bearer is an important enabler for problem resolution. In the study countries where governance systems do not allow duty-bearers to be localised, the environment for problem resolution is constrained. The existence of forums that bring together citizens and duty-bearers as well as other relevant stakeholders can help to construct collaboration and mutual trust, catalysing problem resolution, and can potentially overcome constraining governance structures.

2. The perception of who was ultimately responsible for solving problems was identified as an important factor for problem resolution. In some contexts where lines of accountability are not clear, Integrity Action's partners are well placed to support duty-bearers and monitors to ensure the right stakeholders are targeted to be included in problem resolution processes and to build knowledge of who is responsible.

3. The findings of this study suggest that monitors' perception of who is responsible and the capability and action of duty-bearers to engage with monitors are important factors that enable problem resolution. Therefore, work to strengthen the capability and opportunity of duty-bearers to respond to citizens and activities that build knowledge regarding roles and responsibilities could help to achieve social accountability effectiveness.

Contents

Tables

ECORYS ▲ | Answering tomorrow's challenges today

Figures

Boxes

1.0   Introduction

1.1   Context

Social accountability strategies aim to improve service delivery by increasing citizen engagement and the public responsiveness of duty-bearers (Fox, 2015). Such mechanisms can include innovations that encourage project voice and build citizen power. By bringing citizens and duty-bearers closer together (through a social accountability mechanism or platform), evidence suggests that certain problems regarding service delivery can be solved and responsiveness, transparency, and inclusiveness can be improved (Fox, 2015).

Evaluating the effectiveness of such strategies, however, presents difficulties (Marston et al, 2020). Social accountability interventions are often implemented in contexts with complex social and political processes that require tailored activities (McGee and Gaventa, 2011). Additionally, evaluating the impact of specific mechanisms is difficult as they are implemented as part of a package of citizen-led strategies, for example mobilisation, advocacy, and protest (Joshi, 2013). Understanding the mechanisms that lead to increased social accountability is also dependent on investigating causal factors that change the behaviour of engaged institutions, therefore requiring a broad conceptualisation of equifinality.

1.2   Objectives of the study

Understanding the mechanisms that lead to duty-bearer responsiveness and social accountability effectiveness is the main focus of this study. Through using Integrity Action's approach and initiatives, this study investigates the 'black box' of social accountability to identify the causal factors that lead to positive solutions.[1]

Integrity Action aims to engage with citizens, institutions, and systems to ensure social accountability and integrity is upheld. Through its initiatives, citizens are trained to become monitors who engage with duty-bearers, holding them accountable for problems regarding service delivery and demanding integrity. However, across its initiatives and within different contexts, not all problems reported by citizen monitors have been resolved. As such, further investigation is needed to understand the factors that contribute to problems being resolved. This research study aims to fill this gap. Through a selection of problems resolved and problems outstanding, this study investigates which factors contribute to duty-bearers achieving positive solutions.

Integrity Action defines a problem as occurring when an aspect of a service being delivered has gone wrong, for example when part of the service has not been delivered or there has been a breach of integrity of the institution delivering the service. Problems are reported by monitors to relevant duty-bearers, which is often done through using Integrity Action's DevelopmentCheck (DevCheck) app.[2] Monitors also use project documents to inform their assessment. A fix is also registered through DevCheck when a monitor is satisfied that measures have been put in place to solve the problem. Integrity Action tends to assess success by looking at the fix rate, which is the percentage of all problems raised (in a given project/programme) that are subsequently resolved.

This study is one of two research assignments commissioned simultaneously by Integrity Action. Although connected, the other assignment is specifically focused on what enables and inspires duty-bearers to act with integrity. The study is outward looking and will focus on duty-bearers and institutions not already involved in Integrity Action's initiatives. In contrast, this study is inward looking: it tests the assumptions of Integrity Action's

---

[1] Integrity Action adopts a rights-based approach to its interventions. A rights-based approach seeks to analyse the inequalities which lie at the heart of development problems and redress discriminatory practices and unjust distributions of power that impede development. Investigating the 'black box' relates to unpicking the relationship between citizens as rights-holders and service providers as duty-bearers. Although both parties are usually viewed in opposition, this study will investigate whether evidence of collaboration can be an enabler to the resolution of problems. World Bank (2014) *Opening the Black Box: Contextual Drivers of Social Accountability Effectiveness*, link.

[2] DevelopmentCheck is a software developed by Integrity Action for citizens to report the progress of projects. The data can be viewed in real time and is collected from across Integrity Action's target countries. More information on DevCheck can be found here: link.

Theory of Change regarding how it can add value to the social accountability process and what mechanisms lead to problems being solved. Both citizens and duty-bearers related to projects will be central data points for this study because of the need to understand the process of how reported problems have been resolved, and what they both believe encourages duty-behaviour change. The full report and summary of the other research assignment on enables and inspires duty-bearers to act with integrity are available here.

1.3   Research questions

The below research questions have framed the scope of this study.

Question 1: When problems regarding service delivery are raised by citizens through social accountability mechanisms, what are the factors that lead to duty-bearers resolving these problems? What combinations of these factors have been most successful in enabling positive solutions?

Objectives:

- identify the factors that influence duty-bearers resolving problems raised regarding service delivery,
- identify any factors that are necessary or sufficient for the outcome to be achieved,
- determine the extent to which Integrity Action interventions contribute to solving problems,
- test assumptions underlying Theory of Change and assess whether these assumptions are aligned with the evidence in literature and from the study.

Question 2: What is the relationship between these factors, and how do they impact the achievement of positive solutions?

Objectives:

- understand the causal links between different contributory factors and how these linkages enable or prevent positive solutions,
- determine whether problems resolved rely on the action of duty-bearers or citizens and how this impacts the achievement of positive solutions,
- determine the extent to which duty-bearers and citizens collaborate to identify and respond to problems and whether this impacts the achievement of positive solutions.

Question 3: What learning can be generated for Integrity Action's programming?

Objectives:

- identify the extent to which duty-bearers and citizens value Integrity Action's initiatives to help achieve positive solutions,
- examine how Integrity Action's initiatives could be adapted in the context of COVID-19,
- provide key recommendations for Integrity Action's future strategic approach.

These questions are derived from the Terms of Reference to the study and have slightly been revised in collaboration with Integrity Action.

2.0   Social accountability effectiveness

2.1   Review of literature

Social accountability mechanisms attempt to improve institutional performance by increasing citizen engagement and the responsiveness of public institutions (Fox, 2015). Such mechanisms have been used to generate empirical information for citizens, community groups, and civil society organisations to hold service providers and government officials accountable. Borrowing from Ringold (2012), social accountability mechanisms or interventions can be defined as 'efforts to provide information to citizens and channels to enable them to use the information to hold service providers accountable'. Social accountability mechanisms, therefore, are a subset of demand-side governance activities: the direct influence that citizens exert on service providers (Ringold, 2012). This definition aligns well with Joshi's definition of social accountability as the 'on-going political engagement by societal actors with the state as part of a long-term pattern of interaction shaped both by historical forces and the current context' (Joshi & Houtzager, 2008).

Yimenu (2011) has identified six ways in which social accountability mechanisms can be applied:

- identifying areas of improvement,
- gathering information,
- holding debates and disseminating results,
- building alliances,
- negotiating for change,
- monitoring the sustainability of changes.

Examples of such mechanisms include: citizen report cards, community score cards, public expenditure tracking surveys, citizen information centres, and participatory budgeting.

The conceptualisation by Claasen and colleagues (2010) regarding accountability is useful as it separates the actions of citizens and duty-bearers. Horizontal accountability is where states instigate internal accountability through their own mechanisms, for example political or administrative reforms (Claasen et al, 2010; O'Donnell, 1998). Vertical accountability can be understood as citizen action, where governments are held accountable through elections in a democratic process (Claasen et al, 2010; Mainwaring and Welna, 2003). Social accountability works through both these vertical and horizontal mechanisms of accountability.

The evidence regarding the impact of social accountability interventions, however, remains mixed. Several randomised controlled trails have found a positive impact in some contexts, for example community-based monitoring of health care in Uganda; however, in Zambia, a community monitoring initiative had no impact on improving service responsiveness (Bjorkman and Svensson, 2009; Ngulube et al, 2004).

On the other hand, a macro evaluation of the UK's former Department for International Development found that social accountability processes did, in fact, lead to improved service delivery (Itad, 2017). The support provided to strengthen citizen engagement with service providers was found to contribute to service delivery improvements, as well as help procedures at facilities become more efficient. Additionally, it was found that social accountability works particularly well when there is a 'social contract' between the state and the citizens, enabled by local governance processes which can catalyse citizen engagement (Itad, 2017).

A more recent systematic review of 35 citizen engagement programmes in low- and middle-income countries by 3ie found that mechanisms are effective when promoting citizen engagement through the 'short route' (Waddington et al, 2019). This short route refers to direct engagement between service users and service providers. However, the findings also suggest that citizen engagement interventions alone may not improve citizens' wellbeing if complementary interventions that aim to tackle ineffective service provider supply chains or service use are not implemented (Waddington et al, 2019). Interventions attempting to improve governance by

ECORYS
Answering
tomorrow's
challenges
today

increasing citizen pressures on politicians to hold service providers to account were found to not be able to consistently influence service delivery (Waddington et al, 2019).

The mixed evidence for the effectiveness of social accountability mechanisms may be due to the context in which the mechanism is used. Often, they are implemented in situations with complex and contextually specific social and political processes that require a tailored response (McGee and Gaventa, 2011). Social accountability is inherently political as it focuses on the relationship between citizens and duty-bearers. Navigating these power relationships to try to isolate impact can often lead to studies reducing the complexity and the political dimensions of an intervention's implementation (Boydell et al, 2019). It is also recognised that evaluating the impact of a specific mechanism is difficult, as often they are implemented as part of a package of citizen-led strategies, for example mobilisation, advocacy, and protest (Joshi, 2013).

In June 2017, researchers and implementers working in social accountability and health care came together to discuss the challenges and successes of assessing the effectiveness of social accountability mechanisms in light of many of the challenges highlighted above. When discussing generalising unpredictable, community-driven and context-dependent processes for replication and scale up, there was consensus that further investigation is needed to understand the elements that lead to success (Boydell et al, 2019). Unpacking the mechanisms of effect and determining the 'active ingredients' and how they relate to each other was seen as a vital task to aid methodological approaches that aim to investigate social accountability effectiveness.

2.2   Integrity Action's approach

Integrity Action works to build just and equitable societies in which all citizens can and do successfully demand integrity from the institutions they rely on. Since 2003, its work has focussed on enabling citizens, including the most marginalised, to promote integrity in their communities and wider society, so that public services and development projects are delivered to a high standard. Integrity Action works in close collaboration with its local partners to deliver programme activities. The partners in all target countries provide vital knowledge of, and relationships within, communities, and they often complement its approach with accountability techniques of their own. Through various mechanisms, including the interactive DevCheck online application provided by Integrity Action, citizens make sure that the progress and results of projects and services are publicly visible in real time. By empowering citizens to lead on this process and ensuring they have the power and tools to secure improvements, Integrity Action aims to increase accountability and promote transparency and integrity.

Integrity Action interventions aim to collate and build on citizen feedback and ensure citizens' voices are heard by those institutions delivering services, commonly referred to as duty-bearers (for example local authorities, construction firms, and schools). To this end, citizen appraisal and feedback is collected through Integrity Action platforms to help increase social accountability. Feedback is subjective; it refers to how citizens feel about a service. Appraisal, by contrast, is primarily objective; it refers to citizens establishing exactly what they have been promised and comparing this with what has been delivered. Integrity Action works to combine these two mechanisms, helping citizens to ensure that services are assessed based both on actual commitments and on local needs and requests. Integrity Action's Theory of Change is presented Figure 2.1 below.

Figure 2.1   Integrity Action's Theory of Change[3]
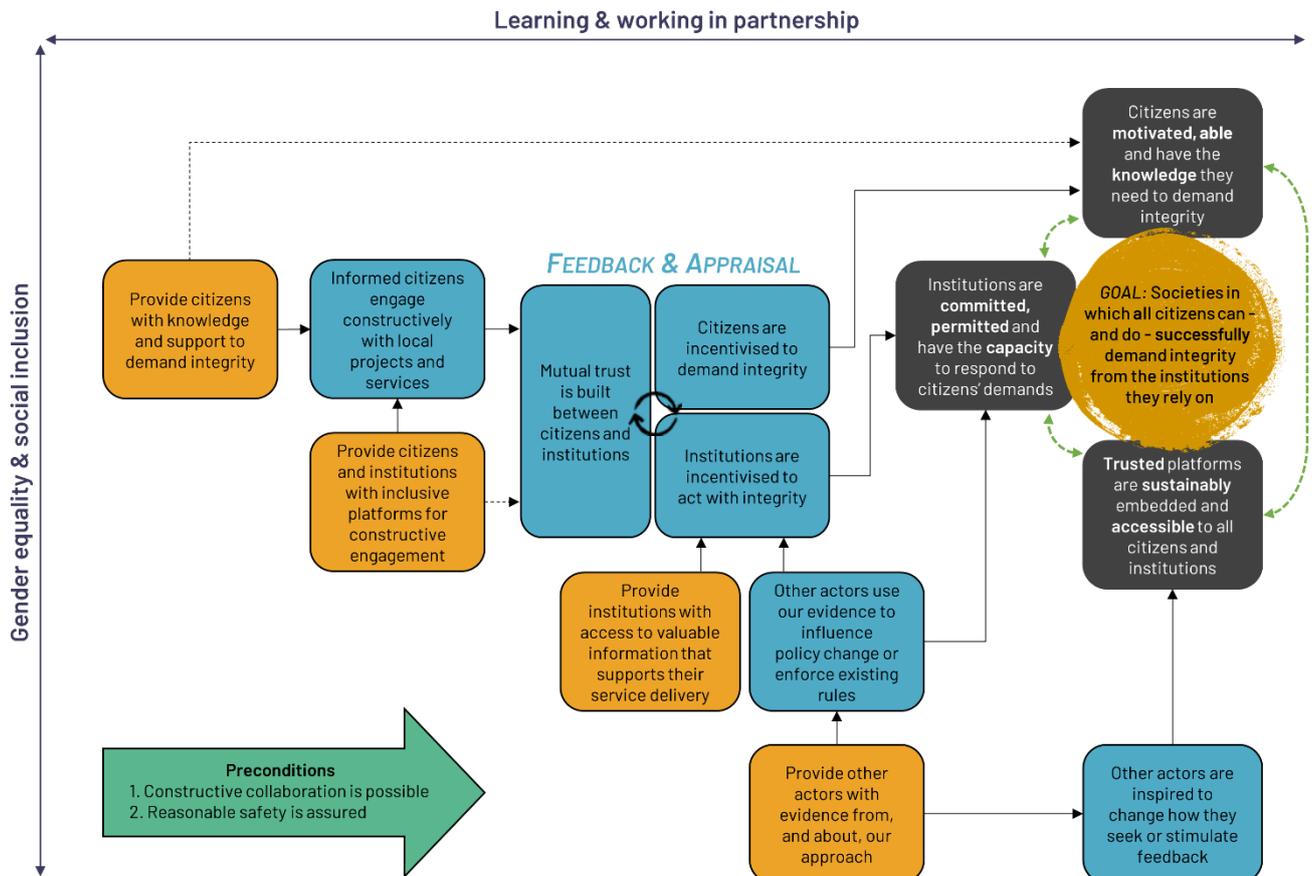
2.3 Integrity Action's initiatives

Integrity Action has multiple initiatives with the aim of building social accountability in its target countries. This study focuses on two of Integrity Action's initiatives: Students Acting for Honesty, Integrity and Equality (SHINE) and Visibility, Openness and Integrity through Community Engagement (VOICE). This section provides further detail both initiatives.

Students Acting for Honesty, Integrity and Equality (SHINE)[4]

This initiative is Integrity Action's only programme focusing solely on young monitors. School students are chosen to become monitors and help to identify and solve integrity problems in their schools. Within this project, 500 Integrity Clubs have been established in secondary schools by Integrity Action's partner organisations in Afghanistan, DR Congo, Kenya, Nepal, and the occupied Palestinian territory.

More than 11,000 students across these countries monitor their own schools. Young people use the DevCheck app to monitor issues in their schools, such as water and sanitation, teacher and student attendance and behaviour, the accessibility of the school facilities, and lack of basic supplies like desks and blackboards. The young monitors form Integrity Clubs, which are set up to ensure the active participation of boys, girls and young people at risk of exclusion (for example due to disability, ethnicity, or living in a particularly high level of poverty). The clubs meet regularly and are supported by a focus teacher, or Integrity Club Patron. Embedding Integrity

---

[3] To see the full narrative complementing the Theory of Change: Integrity Action, Theory of Change, link.
[4] Integrity Action, SHINE, link.

Clubs in schools in this way means it is more likely that there will be support for their activities from within the school and from the community, and as such, that monitoring will be effective in addressing issues.

Visibility, Openness and Integrity through Community Engagement (VOICE)[5]

The devolution process in Kenya started in 2013, and the new devolved structure presents opportunities for citizens to engage more closely and proactively with duty-bearers in order to improve service delivery in the county. As such, Integrity Action's approach was to embed its accountability mechanism in the way citizens and government representatives interact in Kwale County, coastal Kenya. Through supporting active and inclusive community engagement, this initiative aims to contribute to improved transparency, participation, accountability, and performance of public services and infrastructure projects in Kwale.

Citizens act as community monitors and check local infrastructure and services related to health, livelihoods, education, water and sanitation and report problems using the DevCheck mobile app. They then engage constructively with key stakeholders to get the issues addressed, and when problems are fixed, this goes live in the app too. This initiative aims to improve how county authorities and other duty-bearers listen and respond to citizens' concerns on services and infrastructure, with added focus on women's voices.

---

[5] Integrity Action, VOICE, link.

3.0   Methodology

This section provides an overview of the methodology used to investigate the factors that lead to problem resolution and the relationship between these factors. Annex 1 provides more detail regarding the specific steps to complete the QCA, including using the fuzzy-set qualitative comparative analysis (fsQCA) software. QCA is not one aspect of the methodology, but it is an overarching approach that impacts sampling, data collection, and analysis. As such, the following sections are organised following the key six steps of QCA:

- **outcome:** the desired effect under investigation**,**
- **conditions:** factors which are believed to cause an outcome,
- **cases:** examples of where the conditions are present (or not present) to achieve the desired outcome (or where the outcome is absent).

3.1   Qualitative comparative analysis

QCA, developed by Charles Ragin, is a methodological approach which aims to combine the depth and nuance of case study analyses with the rigour of causal quantitative analyses (Ragin, 1987, 2000)**.** Its methodological strengths allow for causal pathways that underpin the impacts of social accountability interventions to be investigated. It also provides an innovative way to test key assumptions underlying theories of change and to account for external factors that may impact success across a set of cases (Legewie, 2013). It is typically used for smaller data sets (between 10 and 100 cases), where statistical analyses would be regarded as unreliable.

QCA identifies the factors (known as conditions) or combinations of factors that are sufficient and/or necessary to achieve the desired outcome. Conditions are not considered in isolation, but rather the method aims to explore how they interact and work together – this is known as configurational causation. Additionally, it is assumed that different combinations of conditions (known as pathways) can produce the same outcome – this is known as equifinality (Ragin, 2000).

Details are provided below regarding each step taken to complete the QCA. Each step is cross-referenced with Annex 1, which provides further detail regarding the cases, data collection, and analysis. The iterative process of the methodological approach is also highlighted in Annex 1. Figure 3.1 below provides an overview of the steps taken to complete the QCA.

Figure 3.1   The steps of QCA

Outcome	Cases	Factors	Data collection	Analysis	Interpretation
• Theory of Chance • Evidence of social accountability effectiveness	• Case studies identified • Cases where the problem is solved and unsolved • Palestine, Kenya and Afghanistan	• Identified factors (conditions) through ToC and literature • Presence or absence of factors will affect outcome	• Calibrated data • Scored conditions and outcome based on membership • Data matrix created	• Truth table created • Resolved contradictions • Ran QCA software to generate sufficiency and necessity analysis	• Within-case analysis to determine relevance of solutions and pathways

ECORYS ▲ | Answering tomorrow's challenges today

Outcome

The outcome investigated in this study is the resolution of a problem raised by a citizen regarding service delivery. Integrity Action's Theory of Change provides a clear indication of causal pathways that are assumed to lead to problem resolution.

3.1.1   Cases

A case refers to a fixed or unfixed problem. Each case is situated within a project – a public service or infrastructure project in a community or school. In collaboration with Integrity Action and its partners, 32 cases were identified across 16 different projects in Afghanistan (8 cases across 4 projects), Kenya (16 cases across 8 projects) and Palestine (8 cases across 4 projects). Out of the 32 cases, 29 cases related to infrastructure projects: 10 cases related to the construction of schools, 10 cases related to issues regarding community infrastructure projects (e.g. accessibility or issues with the timing of the work), 4 cases related to the construction of water supply for communities, and 5 cases related to issues with water and sanitation infrastructure in schools. The remaining three cases related to schools' lack of resources.

The cases pertained to two initiatives: Visibility, Openness and Integrity through Community Engagement (VOICE) in Kenya, and Students Acting for Honesty, Integrity and Equality (SHINE) in Afghanistan and Palestine. Figure 3.2 below details the projects per country, with the relevant Integrity Action partner responsible for the project also included. Summaries of the solved and unsolved cases per project is provided in Annex 1.

Figure 3.2 Summary of cases

Country	Initiative	Project	Partner
Kenya	VOICE	1. Kwale County Construction of Dzivani ECDE **(CDECDE)** 2. Construction of Magwagwaru ECDE **(CMECDEX)** 3. Construction of Mnyenzeni Primary School **(CMPS)** 4. Construction of Mtsahuni ECDE **(CMECDE)**	Kwale Youth Governance and Consortium (KYGC)
		5. Construction and Drilling of Mkwakwani Borehole and Water Supply **(MBWS)** 6. Construction and Rehabilitation of Majimoto Hot Springs Ecosystem **(MHS)** 7. Construction of Ganze ECDE **(CGECDE)** 8. Construction of the Collection Rice Centre at Vanga Village **(RCVV)**	Kwale County Natural Resources Network (KCNRN)
Palestine	SHINE	1. Ateel Club for Females − Rainwater Assembly System Project **(ACF)** 2. Tulkarm Females Club − Project of Street Paving in Tulkarm **(TCF)** 3. Tulkarm Males Club − Project of Solar Energy Over Municipal Buildings **(TCM)** 4. Qalqiliah Females Club − Project of the Children Garden and Equipment **(QCF)**	Palestinian Centre for Peace and Democracy (PCPD)
Afghanistan	SHINE	1. Anonymous Secondary School **(WSS)** 2. Anonymous High School **(MRS)** 3. Anonymous Secondary School **(HSS)** 4. Anonymous High School **(QMOS)**	Integrity Watch Afghanistan

3.1.2   Conditions

The COM-B model was used to identify and organise key conditions that, if present, were assumed to enable duty-bearers to respond to citizen-identified problems. Integrity Action's Theory of Change and wider literature on social accountability were also used to select the factors to be included in the study. Developed by Susan Michie and colleagues, the COM-B model provides a framework for assessing the internal and external conditions driving certain behaviours (Michie et al., 2011). The model identifies three factors that need to be present for any behaviour to occur: capability, opportunity and motivation.

To finalise the list of conditions, we reviewed existing programme documents, including case studies, to assess whether the conditions identified were evident in cases where problems have been fixed. We also asked for Integrity Action staff and partners to feedback on the list of conditions and reflect if any important factors were missing. We have provided hypotheses and definitions for each condition, building on the literature to describe our assumptions regarding how each factor may influence behaviour change.

Figure 3.3 highlights our finalised list of conditions, organised by the COM-B model.

Figure 3.3 Conditions mapped to the COM-B model
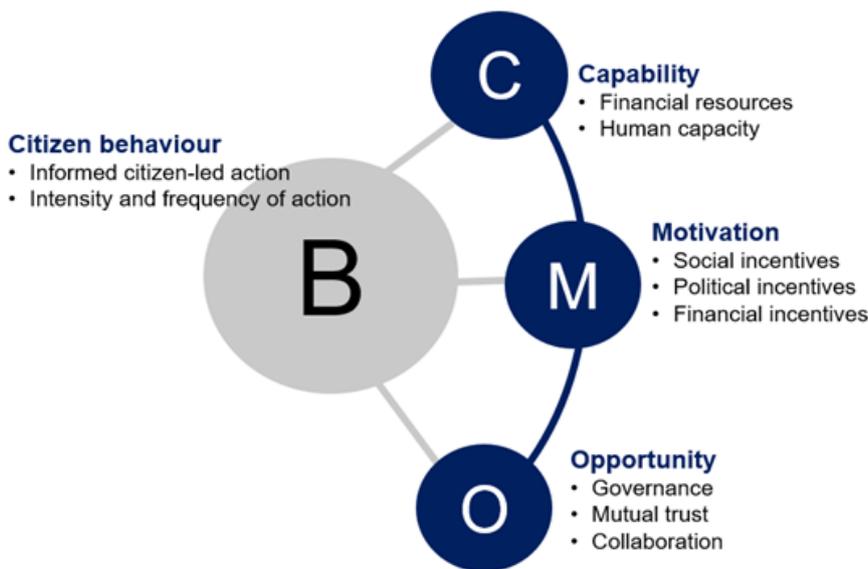
Specific to this study, COM-B is defined as the following:

- **Capability:** adequate financial resources and human capacity of duty-bearers enable them to respond to citizen voice,
- **Opportunity:** open governance systems enable closer collaboration between duty-bearers and monitors to solve problems, increasing mutual trust,
- **Motivation:** solving problems can lead to benefits (social, political, financial) that may motivate duty-bearers to act,
- **Citizen Behaviour:** the behaviour of citizens may influence duty-bearers' responsiveness.

Table 3.1 below provides further detail regarding the definition and hypothesis related to each condition presented in

Figure 3.3. The icons correspond with the icons used to represent the conditions in Section 5.

ECORYS | Answering tomorrow's challenges today

Table 3.1 List of conditions with corresponding definition and hypothesis

Factor	Definition	Hypothesis
Financial resources	Duty-bearers possessing sufficient financial resources.	Financial resources increase the ability to make significant changes to service delivery.
Human capacity	Duty-bearers possessing adequate human capacity to engage with citizens. Duty-bearers understanding priorities of citizens.	Adequate human capacity increases likelihood that duty-bearers will respond to citizens' voice.
Governance	Level of devolution and number of opportunities for citizens and duty-bearers to discuss and negotiate solutions.	In a more centralised governance system, duty-bearers have less opportunity to resolve problems and respond to citizens' voice.
Mutual trust	Levels of trust between citizens and duty-bearers.	Existence of trust between citizens and duty-bearers will enable open discussions and the opportunity to engage in service delivery.
Collaboration	Level of collaboration between citizens and duty-bearers.	Citizens and duty-bearers have a synergistic or cooperative relationship that enables citizens to play an active role in service delivery, moving beyond the state−society dichotomies.
Social incentives	Duty-bearers have social incentives to resolve problems (social norms, resolution of problems is shared).	Social norms and values can function as an important motivation for duty-bearers to deliver effective public services.
Political incentives	Duty-bearers have political incentives to resolve problems (upcoming elections, political credibility, etc).	Political benefits as a result of resolving problems can drive duty-bearers to respond to citizen-identified problems in service delivery.
Financial incentives	Duty-bearers have financial/material incentives to resolve problems.	Monetary or material incentives can increase likelihood of duty-bearers resolving problems.
Informed citizen-led action	Citizen-led action that is informed and targeted.	Information of specific entitlements, legislation and rights will impact the action citizen's take and the motivation of duty-bearers to respond.
Intensity or frequency of action	Level of intensity/frequency of citizen engagement.	The way in which citizens engage with duty-bearers (confrontational or collaborative) and the regularity of this engagement.
Issues with subcontractor[6]	Extent to which subcontractors have caused issues with projects.	Subcontractors that have caused issues with the delivery of a project (faulty construction materials etc.) can become a barrier for duty-bearers to resolve problems.

---

[6] This factor was not identified through the literature and, therefore, not originally included, but it was added as it became clear following interviews that many problems were caused by subcontractors involved in the project. In many cases, both monitors and duty-bearers reported that problems remained unsolved because of an error on the part of the subcontractor.

3.1.3   Data collection

We chose to use fuzzy-set QCA. Practically, this means each factor is not binary (Yes/No), but rather coded on a scale between 0 and 1 (Ragin, 2007)**.** As such, stakeholders relevant to each case were asked to score the presence of each condition on a scale of 0 to 1, where 1 reflects full membership (or presence) and 0 represents no membership (or absence). In a fuzzy-set data matrix, the presence of the conditions is operationalised according to the following thresholds: 0, 0.2, 0.4, 0.6, 0.8 and 1.

Under each numerical categorisation, we created certain criteria or indications for each condition to allow for accurate and consistent coding. Annex 1 provides detail of the scoring threshold for each condition.

Primary data

Interviews were held in all study countries with the monitors and duty-bearers identified as relevant to each case. The DevCheck app was used to identify the monitors and duty-bearers and the in-country partners verified the list of stakeholders. The interviews were semi-structured, and topic guides were created and tailored by stakeholder type, in line with relevant research questions. In addition to being asked to score the presence or absence of the conditions, stakeholders were also asked to provide an assessment as to how the problem was solved and which factors contributed to problem resolution. Stakeholders were also asked to reflect on which conditions worked together to achieve problem resolution, where relevant. Due to COVID-19, interviews were held in person where possible (Palestine) and remotely when the risk of in-person data collection was deemed too high. We worked with local researchers in all countries (Afghanistan, Kenya and Palestine) to access hard-to-reach participants and ensured interviews were held in safe environments. Local researchers also provided translation and transcript services.

3.1.4   Analysis

Having scored our conditions and outcome for each of the cases, we used the fsQCA software to transform our data into a truth table, which identifies each possible combination of present and absent conditions, along with the corresponding outcome from the relevant cases. The truth table indicates if any of the cases are contradictory (where the cases have the same combination of conditions but differing outcomes). Following best practice, we used several approaches to remove such occurrences from our data, including tightening our score definitions, deleting two of our cases, and adding in the 'issues with subcontractor' variable (detailed further in Annex 1) (Wagemann and Schneider, 2007). In turn, we completed both sufficiency and necessity analyses, as well as several robustness checks (detailed in Annex 1). Our parsimonious and intermediate solutions can be found in Section 4 and complex solution results can be found in Annex 1.

3.1.5   Adaptations and limitations

Following the inception phase, various decisions were made in light of challenges to our methodological approach, particularly in relation to data collection. This subsection details the key changes from the inception phase, which should be considered when reading the report. Limitations to our approach are also identified.

Adaptations:

- **Case selection:** As stated in our Inception Report, we originally chose to include 16 cases relating to the SHINE and VOICE initiatives (8 cases respectively) in Kenya. However, due to the national lockdown in Kenya, schools were closed for a considerable amount of time during our data collection period. Therefore, we chose to include 16 cases in Kenya relating to the VOICE initiative only. Unfortunately, this meant we were not able to compare SHINE and VOICE cases in the same country context.

- **Data collection during COVID-19:** Due to the COVID-19 pandemic, all data collection was conducted remotely with the exception of Palestine. Although we were able to speak to all identified stakeholders, in some cases, the richness of data in relation to some conditions was lacking.
- **COVID-19 aspect of Research Question 3:** An original objective of the third research question was to investigate how Integrity Action could adapt its programming in light of the challenges relating to COVID-19. Questions relating to this were included in our topic guides for relevant stakeholders to reflect on; however, stakeholders were not able to provide adequate answers to these questions. This was partly due to the need to prioritise the scoring of conditions and the assessment of which conditions work together to solve problems. More strategic-level interviews with partners and academics could help to answer this question in the future.
- **Engagement with national and sub-national stakeholders:** Our Inception Report highlights that we planned to speak to national and sub-national stakeholders to understand the relationship between citizens and duty-bearers beyond the local and project-specific level. The second piece of research commissioned by Integrity Action investigates the relationship between duty-bearers and citizens beyond the project level, so this was not a priority for this study.
- **Research Steering Committee:** In light of these changes and adaptations, we presented our approach and emerging findings to the Research Steering Committee, who provided useful technical advice on both the design of our approach and our assessment of the relevance of the pathways.

Limitations:
- **Country variation:** Country variation affected findings. Most prominently, incentives were not used in Kenya, leading to a large number of 1s for these conditions, and reducing the diversity, causing the absence of such variables to be incorrectly identified as (typically) necessary. As a robustness check, we re-ran the analysis with the incentive conditions deleted, but this did not impact the results for the three solutions. We also tried running the analysis with an additional 'country' variable (signalling the country of each case), but this had no impact on the results either.
- **The iterative process:** The iterative nature of QCA was resource intensive: we moved between the fsQCA software and within-case analysis several times before we were able to determine our final solutions and pathways. During the process, we made several changes following best practice (Wagemann and Schneider, 2007), such as transforming our outcome variable from crisp to fuzzy data (to better capture the nuances of the cases), and redefining our scoring systems, adding a variable, and deleting two cases in order to remove contradictions from our data set (the iterative steps of our analysis are presented in Annex 1).
- **Number of conditions vs number of cases:** Best practice states that the number of cases should be 2^ the number of conditions included (Wagemann and Schneider, 2007). The number of possible configurations increases exponentially according to an increase in the number of conditions; this increases the likelihood that there will be a number of configurations for which there are no cases (Cragun et al., 2015). The ratio of conditions and cases included in this study is not optimal, particularly as we included an additional condition after data collection. However, as noted, this significantly improved our results.
- **Methodological ambiguities:** There remains debate pertaining to certain aspects of the QCA methodology, such as the relative merits of the different solutions, and the minimum coverage and consistency scores to regard results as significant (Berg-Schlosser et al., 2008; Schneider and Wagemann, 2006). We used our best judgement based on our knowledge of our cases, as well as extensive research of what constitutes 'best practice' within QCA (Wagemann and Schneider, 2007).

4.0   QCA results

Relevant research question:

- **Question 1:** When problems regarding service delivery are raised by citizens through social accountability mechanisms, what are the factors that lead to duty-bearers resolving these problems? What combinations of these factors have been most successful in enabling positive solutions?

Summary of findings:

- QCA generates three types of solutions: **parsimonious**, **intermediate** and **complex**. The causal pathways included in the parsimonious solutions are the simplest causal pathways that lead to the outcome.
- The intermediate solution reveals that a greater proportion of the conditions are likely to contribute to achieving the desired outcome.
- Parsimonious pathways are useful to interpret because of their lack of complexity (two or three conditions are present), compared to intermediate and complex solutions that contain several conditions.
- The parsimonious pathways will be investigated further, focusing on the relationship between the conditions of each pathway and how they work together (or do not work together) to achieve the outcome.

The results of the QCA are presented in this section. Annex 1 provides further detail regarding how the fsQCA software generates solutions and pathways based on the cases and fuzzy-set scoring of the original data matrix. Additional analysis is provided in this section regarding the conditions which have been determined as necessary for the outcome to be achieved.

4.1   QCA results

The solutions, or 'recipes of conditions', generated by the QCA each have corresponding consistency and coverage scores, and each pathway within the solutions also has its own coverage and consistency scores – these terms are defined below in Table 4.1 (Ragin, 2017). Where unique coverage is particularly low for two or more pathways, these pathways should be regarded as 'competing solutions', and best practice notes that the researcher should conduct within-case analysis (and consult with relevant literature and theory) to determine which of these solutions is the most convincing. Within-case analysis to investigate the most relevant solutions is provided in Section 5.

Table 4.1: Definitions of QCA terms

Term	Definition
Solution coverage	The proportion of the memberships in the outcome that is explained by the entire solution (or the total coverage across each of the pathways).
Solution consistency	The degree to which membership in the solution is a subset of membership in the outcome.
Raw coverage	Each pathway's raw coverage score is a measure of the frequency of that pathway to the outcome.

ECORYS | Answering tomorrow's challenges today

Term	Definition
Unique coverage	The proportion of the solution coverage which is only covered by that particular pathway.
Consistency	Each pathway's consistency score is a measure of the degree to which cases that follow that same pathway also share the same outcome.

There are three different solutions generated by the QCA: parsimonious, intermediate, and complex, which are set out in Sections 4.1.1 and 4.1.2 and Annex 1**.** The solutions differ in the approach taken during the minimisation process – the complex solution takes a more conservative approach, resulting in longer solutions which cover a larger proportion of the conditions, while the parsimonious solution is regarded as the most reduced function possible. The intermediate solution is seen as striking a 'middle ground' between the other two. For this reason, the intermediate solution is the most commonly selected solution to conduct further within-case analysis, though best practice notes that selection should be undertaken on a project-by-project basis, which is discussed in Section 4.2. The complex solution is presented in Annex 1. Due to the high number of conditions and the inclusion of both the absence and presence of conditions, the complex solution pathways do not provide appropriate answers to the research questions, and have therefore not been assessed in further detail.

4.1.1   Parsimonious solution

The parsimonious solution is the most reduced function possible, meaning it is the simplest causal solution that leads to the outcome.

The parsimonious solution pathways are presented in Table 4.2 along with each solution's corresponding raw coverage and consistency scores. The **solution coverage is 0.876**, and the **solution consistency is 0.859**.

Table 4.2: Parsimonious pathways and corresponding raw coverage, unique coverage, and consistency scores

Solution	Raw coverage	Unique coverage	Consistency
Informed Citizen-led Action AND Human Capacity	0.704	0	0.902
Mutual Trust AND Human Capacity	0.752	0	0.887
Mutual Trust AND Financial Resources	0.723	0	0.863
Informed Citizen-led Action AND Collaboration AND Financial Resources	0.657	0	0.92

Solution	Raw coverage	Unique coverage	Consistency
(Not) Political Incentives AND Social Incentives AND Collaboration[7]	0.219	0	0.92
(Not) Political Incentives AND Intensity and Frequency of Action AND Collaboration	0.58	0	0.938
(Not) Financial Incentives AND Governance AND Human Capacity	0.752	0	0.887

4.1.2   Intermediate solution

The intermediate solution pathways are presented in Table 4.3. The **intermediate solution coverage is 0.704**, and the **solution consistency is 0.913**.

Table 4.3: Intermediate pathways and corresponding raw coverage, unique coverage, and consistency scores

Solution	Raw coverage	Unique coverage	Consistency
Issues with Subcontractor AND Informed Citizen-led Action AND Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Financial Resources	0.342	0.028	0.947
Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Governance AND Human Capacity AND Financial Resources	0.571	0.247	0.923
Issues with Subcontractor AND Informed Citizen-led Action AND Social Incentives AND Collaboration AND Mutual Trust AND Governance AND Financial Resources	0.104	0	0.916
Issues with Subcontractor AND Informed Citizen-led Action AND Social Incentives AND Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Governance AND Human Capacity	0.180	0.09	0.904

---

[7] The absence of a condition in a pathway is noted by the QCA using the ~ sign. We have replaced this sign with 'not' for ease.

4.2   Comparison of parsimonious and intermediate solutions

There are similarities between the conditions generated in both the parsimonious and intermediate solutions, though as expected, the intermediate solutions cover a larger number of conditions. However, the complexity of the intermediate solution makes interpretation challenging (this was also true for the complex solution, which can be found in Annex 1). We have decided to focus the analysis on the parsimonious solutions, given the higher solution coverage. Focusing on a smaller number of factors also facilitates gaining a deeper understanding of how the conditions are interacting and working together to produce the outcome. As the unique coverage is very low for each of the different pathways within the parsimonious solution, further analysis is necessary to determine the relevance of the pathways in relation to the cases.

4.3   Necessity analysis

The necessity results are presented in Table 4.4**. Generally, a consistency score of 0.8 is used to describe a condition as 'typically necessary'** (Rohlfing and Schneider, 2013). Within our results, collaboration, human capacity, governance, mutual trust, and informed citizen-led action, as well as the absence of financial incentives and political incentives scored at least 0.8 for consistency. However, the incentive conditions display high consistency scores due to their lack of diversity, rather than because their absence is necessary. We were able to confirm this through our within-case analysis (see Section 5).

Table 4.4: Necessity results

Presence of conditions	Consistency	Absence of conditions	Consistency
Collaboration	0.923	Financial incentives	0.980
Mutual trust	0.876	Political incentives	0.857
Governance	0.828	Social incentives	0.685
Human capacity	0.809	Intensity and frequency of action	0.409
Informed citizen-led action	0.800	Issues with subcontractor	0.371
Financial resources	0.761	Human capacity	0.295
Issues with subcontractor	0.685	Informed citizen-led action	0.257
Intensity and frequency of action	0.647	Financial resources	0.266
Social incentives	0.323	Governance	0.209
Political incentives	0.171	Mutual trust	0.171
Financial incentives	0.028	Collaboration	0.095

5.0   Pathways leading to problem resolution

Relevant research questions:

- **Question 1:** When problems regarding service delivery are raised by citizens through social accountability mechanisms, what are the factors that lead to duty-bearers resolving these problems? What combinations of these factors ha been most successful in enabling positive solutions?
- **Question 2:** What is the relationship between these factors and how do they impact the achievement of positive solutions?

Summary of findings:

- Within-case analysis allows investigation and interpretation of the causal pathways in relation to the cases generated as relevant by QCA.
- Two parsimonious pathways have been identified as relevant through analysis of case data.
- Both pathways are catalytic as they enable other important factors that work together to achieve problem resolution. A monitor requires **access to information** to raise a problem, and a solution will likely occur if the duty-bearer has **human capacity** to engage and **governance systems** allow for close interaction so that **mutual trust** can be built (especially if there are **social incentives** to act), leading to a **collaborative approach** to solve the problem.

This section assesses the relevance of the pathways generated through QCA, presented in Section 4. As this section moves from QCA analysis to qualitative analysis to assess the relevance of the pathways, we use factors to refer to the conditions identified. The most relevant pathways are identified and further analysis highlights the relationships between factors achieving problem resolution. This section also includes country case studies for the three countries in scope of the study (Afghanistan, Kenya and Palestine). Additional sub-group analysis and assessment of unsolved cases are presented in the final sub-sections.

For each case generated by QCA as relevant per pathway, within-case analysis was completed to determine which pathway had the most relevance consistently for all cases.[8] The analysis draws on qualitative interviews with a range of stakeholders (monitors and duty-bearers) per case, and their assessment as to how the problem was solved and which factors contributed to problem resolution.

5.1   Informed Citizen-led Action AND Human Capacity

This section investigates the relevance of the Informed Citizen-led Action AND Human Capacity pathway to achieving problem resolution. QCA generated 16 cases as relevant to this pathway: 12 solved cases and 4 unsolved cases. Table 5.1 presents the cases that were judged to be relevant and not relevant through within-case analysis for this pathway.

Table 5.1: Informed Citizen-led Action AND Human Capacity cases

Solved and relevant	Solved but not relevant	Unsolved
• Drilling of Mkwakwani Borehole Water Supply 1 (MBWS1) • Construction of Ganze ECDE 1 (CGECDE1) • Construction of Magwagaru ECDE 1 (CMECDEX1)	• Construction of the Collection Rice Centre at Vanga Village 1 (RCVV1) • Qalqiliah Females Club – Project of the Children	• Construction and Rehabilitation of Majimoto Hot Springs Ecosystem 2 (MHS2) • Construction of Ganze ECDE 2 (CGECDE2)

---

[8] Within-case analysis is a vital stage of QCA as it enables a deeper understanding of how each pathway is relevant to the cases. Through investigating each case that has been generated by QCA as relevant to the solution, it is possible to assess the extent to which conditions work together to achieve the outcome and whether other conditions have been omitted that need to be included.

ECORYS ▲ | Answering tomorrow's challenges today

• Construction of ECDE Dzivani 1 (CDECDE1) • Construction of Mtsahuni ECDE 1 (CMECDE1) • Construction of Mnyenzeni Primary School 1 (CMPS1) • Anonymous High School 1 (MRS1) • Anonymous Secondary School 1 (WS1)	Garden and Equipment 1 (QCF1) • Anonymous Secondary School 1 (HSS1) • Anonymous High School 1 (QMOS1)	• Construction of the Collection Rice Centre at Vanga Village 2 (RCVV2) • Construction of Mnyenzeni Primary School 2 (CMPS2)

The **Confusion Matrix** presented in Figure 5.1 below organises all 30 cases included in the study (as presented in Section 2 of Annex 1) by the following categories:

- **True-positive cases (TP)**, where the solution is present and the outcome is present
- **False-positive cases (FP)**, where the solution is present but the outcome is not present
- **False-negative cases (FN)**, where the solution is present despite the absence of the factors
- **True-negative cases (TN)**, where the absence of the solution is associated with the absence of the outcome

Figure 5.1 Confusion Matrix for Informed Citizen-led Action AND Human Capacity pathway[9]
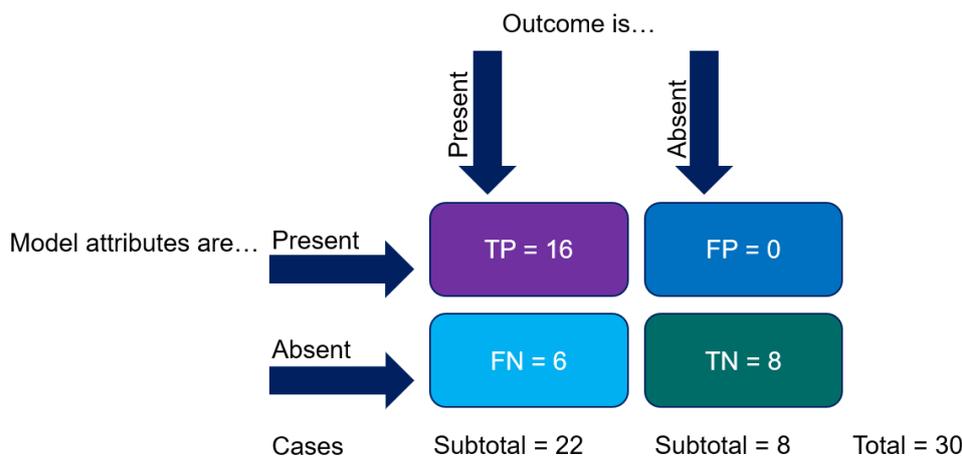
5.1.1   Solved and relevant

Out of the 12 solved cases, 8 cases have been identified as relevant through within-case analysis, highlighting that when monitors have **access to adequate information** to identify and report the problem accurately, and when duty-bearers have the **human capacity** and competence to act upon that information, problem resolution is likely. In all solved cases where the pathway is relevant, **collaboration** and **mutual trust** are also present and work with **informed citizen-led action** and **human capacity** to solve the problem. Box 1 below provides an example that highlights the relationship between both factors.

---

[9] In order to create the Confusion Matrix, cut-off points were selected. The cut-off point to represent the absence of each condition and the outcome is 0.4. The cut-off point to represent the presence of each condition and the outcome is 0.6. Note that the fuzzy-set scoring and definitions of the outcome (see Annex 1, Section 1) do not fully align with the cut-off point needed for the Confusion Matrix.

Box 1 Construction of Magwagaru ECDE (CMECDEX1)

Construction of Magwagaru ECDE (CMECDEX1, Kenya, VOICE): Informed Citizen-led Action AND Human Capacity

The monitors identified that the subcontractor was using faulty roofing materials (low-quality poles), compromising the stability of the ECDE. The monitors informed the Village Administrator (the duty-bearer) who also verified that the subcontractor was in violation of the specifications in the Bill of Quantities and visited the construction site with the monitors. The duty-bearer hosted a Joint Working Group (JWG) to discuss the problem and what solutions were available to solve the problem. Through the JWG, the duty-bearer pressured the subcontractor to replace the low-quality materials with the materials stated in the Bill of Quantities. The problem was fully resolved.

In the case of Construction of Magwagaru ECDE (CMECDEX1), informed citizen-led action and human capacity are both evident and work together to achieve problem resolution. The monitors were able to identify the problem by using **information** available regarding the construction work and the Village Administrator possessed **human capacity** to engage with the monitors and the subcontractor to pressure them to resolve the problem. The monitors and Village Administrator reported that there were high levels of **trust** which enabled them to work together to resolve the problem. Through this trust, **collaboration** is enabled; the monitors and duty-bearer visited the construction site to verify the issue and engaged in various meetings, including other stakeholders where necessary. This indicates that a solid and trustworthy relationship between the monitors and the duty-bearer enables non-confrontational engagement and encourages the monitors to rely on the **human capacity** of the duty-bearer to engage in the process of problem resolution. The existence of well-established **participatory mechanisms** seems to have aided problem resolution across these cases, especially where monitors could use these platforms to discuss problems openly and based on **mutual trust** (for example in JWGs).

Figure 5.2 below reflects how informed citizen-led action and human capacity worked together, along with additional factors, in the 8 cases where this pathway was relevant:

ECORYS | Answering tomorrow's challenges today

Figure 5.2 Informed Citizen-led Action AND Human Capacity causal pathway
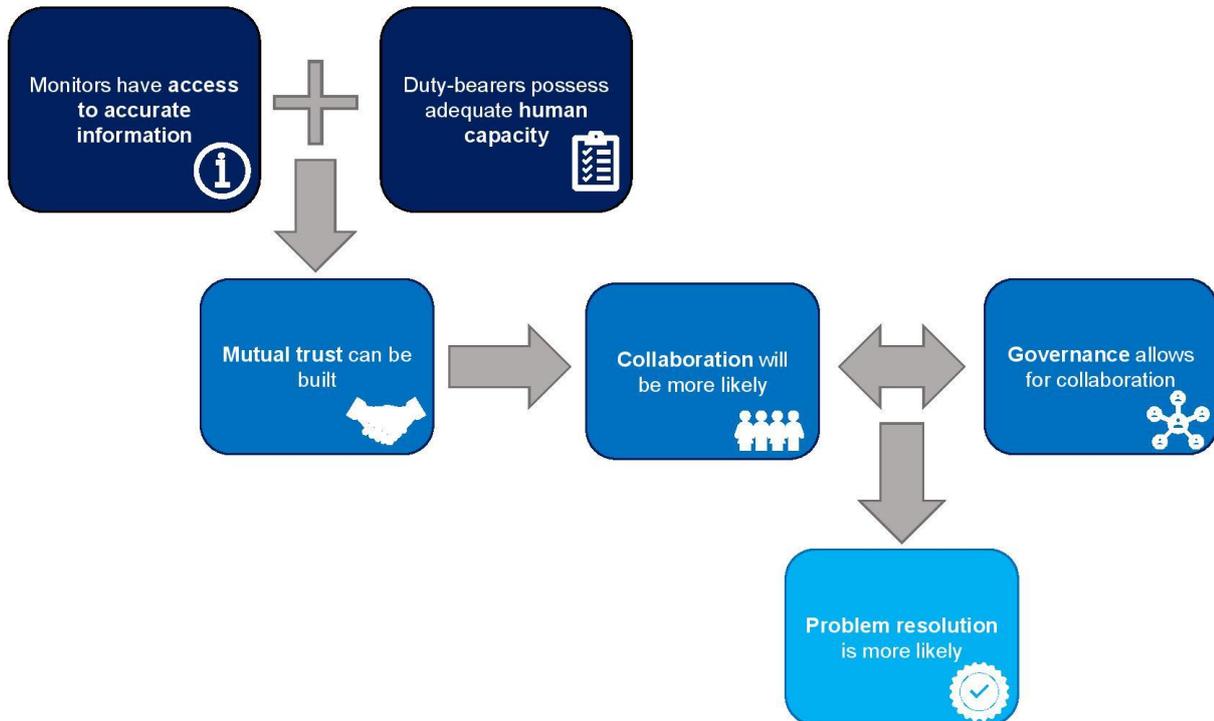
5.1.2   Solved but not relevant

Out of the 12 solved cases generated by QCA, 4 were identified as not relevant to this pathway through within-case analysis (see Table 5.1). Analysis of why these cases have been identified as not relevant is provided in this subsection. The Anonymous Secondary School (HSS1) case is one of the 4 cases that does not align with this pathway. A summary of the case is provided in Box 2.

Box 2 Anonymous Secondary School (HSS1)

Anonymous Secondary School (HSS1, Afghanistan, SHINE): Pathway not relevant

The problem related to the lack of clean drinking water available at the school. The problem had existed since early 2019, but due to a lack of financial resources, no solution had been identified. The students highlighted that this problem had been raised to the Directorate of Education, but no action had been taken. The Integrity Club worked closely with the school principal to create a fundraising campaign to raise money. With help from the community, money was raised to build a water storage and filter unit. The problem was solved due to the ability to work closely with the school principal and raise the money through community support.

In the case of Anonymous Secondary School (HSS1), the students who formed the Integrity Club reported that they were aware of their entitlements and rights, but this was not made clear to them through official information sources. Additionally, the students noted it was not clear who was responsible for protecting their rights and solving the identified problems. The lack of clear accountability lines is relevant across many of the cases, especially cases in Afghanistan. The lack of knowledge regarding who is ultimately responsible was consistently highlighted by the students as a barrier to problem resolution (see Section 5.7 for more details). In this case, therefore, **informed citizen-led action** and **human capacity** did not work together to solve the problem. Although the school

principal demonstrated sufficient capacity to engage with the students to create the fundraising campaign, the students did not have access to adequate information regarding who was responsible for solving the problem. As such, the students used their own initiative to solve the problem with the principal.

Two additional solved cases that do not align with this pathway are from Palestine, where there is evidence of scarce human capacity and moderate levels of access to adequate information.

- **Ateel Club for Females – Project of the Rainwater Assembly System 1 (ACF1):** The municipality (the duty-bearer) did not have the necessary **human capacity** to prevent the problem from occurring, but the monitors reported they had adequate **access to information** that was leveraged through a collaborative engagement with the duty-bearer to advocate for a resolution to the problem. In this case, **financial resources** also played a key role, as the municipality had the resources to prioritise the problem and assign workers to fix it.
- **Qalqiliah Females Club – Project of the Children Garden and Equipment 1 (QCF1):** Both the monitor and the duty-bearer reported that there was sufficient **human capacity** to solve the problem if sufficient **financial resources** were allocated. The monitors reported that **access to information** did not affect problem resolution as much as **collaboration** and the duty-bearer's desire to avoid reputational consequences if the problem was not solved (**social incentives**). Therefore, in both Palestinian cases, the pathway of **informed citizen-led action** and **human capacity** did not appear to be fundamental for problem resolution, as either factor was present only to a limited extent.

5.2   Mutual Trust AND Human Capacity

This section investigates the relevance of the Mutual Trust AND Human Capacity pathway to achieving problem resolution. The QCA results highlighted 16 cases as relevant to this pathway: 12 are solved cases and 4 are unsolved. Table 5.2 presents the cases that were judged to be relevant and not relevant through within-case analysis.

Table 5.2: Mutual Trust AND Human Capacity cases

Solved and relevant	Solved but not relevant	Unsolved
- Drilling of Mkwakwani Borehole Water Supply 1 (MBWS1) - Construction of Ganze ECDE 1 (CGECDE1) - Construction of Magwagaru ECDE 1 (CMECDEX1) - Construction of ECDE Dzivani 1 (CDECDE1) - Construction of the Collection Rice Centre at Vanga Village 1 (RCVV1) - Construction of Mtsahuni ECDE 1 (CMECDE1) - Construction of Mnyenzeni Primary School 1 (CMPS1) - Anonymous High School 1 (MRS1) - Anonymous Secondary School 1 (WS1) - Anonymous Secondary School 1 (HSS1) - Anonymous High School 1 (QMOS1)	Qalqiliah Females Club – Project of the Children Garden and Equipment 1 (QCF1)	- Construction and Rehabilitation of Majimoto Hot Springs Ecosystem 2 (MHS2) - Construction of Ganze ECDE 2 (CGECDE2) - Construction of the Collection Rice Centre at Vanga Village 2 (RCVV2) - Construction of Mnyenzeni Primary School 2 (CMPS2)

The **Confusion Matrix** presented in Figure 5.3 below organises all 30 cases included in the study (as presented in Section 2 of Annex 1) by the following categories:

ECORYS
Answering
tomorrow's
challenges
today

- **True-positive cases (TP)**, where the solution is present and the outcome is present
- **False-positive cases (FP)**, where the solution is present but the outcome is not present
- **False-negative cases (FN)**, where the solution is present despite the absence of the factors
- **True-negative cases (TN)**, where the absence of the solution is associated with the absence of the outcome

Figure 5.3 Confusion Matrix for Mutual Trust AND Human Capacity pathway [10]
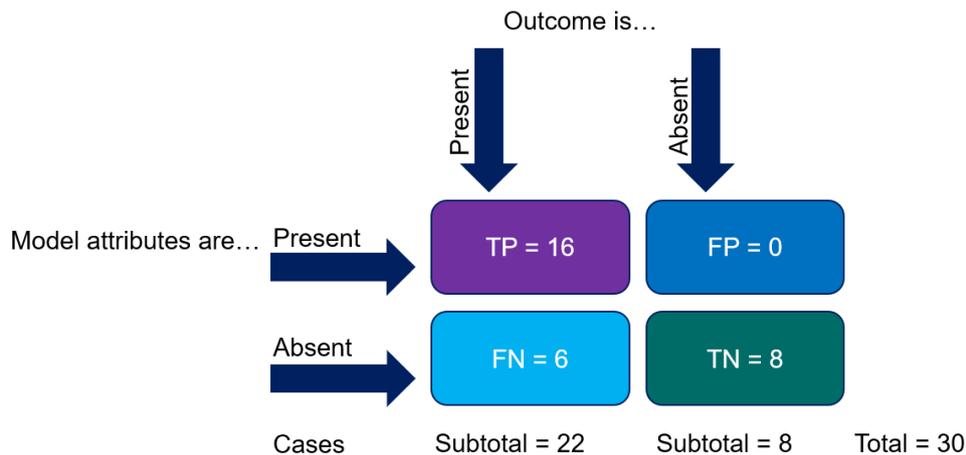
5.2.1   Solved and relevant

This pathway is considered to be very relevant to the majority of solved cases. Out of the 12 solved cases, 11 cases have been identified as relevant, highlighting that when there is strong **mutual trust** present between duty-bearers and monitors, and the duty-bearer has the **human capacity** and expertise to engage with monitors and identify a solution, problem resolution is highly likely to occur. The **Construction of Mtsahuni ECDE (CMECDE1)** case highlights the interconnectedness of both factors and the relevance of this pathway. A summary of the case is provided Box 3.

---

[10] In order to create the Confusion Matrix, cut-off points were selected. The cut-off point to represent the absence of each condition and the outcome is 0.4. The cut-off point to represent the presence of each condition and the outcome is 0.6. Note that the fuzzy-set scoring and definitions of the outcome (see Annex 1, Section 1) do not fully align with the cut-off point needed for the Confusion Matrix.

Box 3 Construction of Mtsahuni ECDE (CMECDE1)

Construction of Mtsahuni ECDE (CMECDE1, Kenya, VOICE): Mutual Trust AND Human Capacity

The presence of a bush was preventing the continuation of construction work. The monitors consulted with the Project Management Committee, community members and the Village Administration (duty-bearer). After the involvement of the duty-bearer, the bush was finally cleared, and the workers' safety was no longer compromised.

In the case of the Construction of Mtsahuni ECDE (CMECDE1), mutual trust and human capacity have worked very closely together to enable the resolution of the problem. Both the monitors and the Village Administrator highlighted that they have a strong relationship and **trust** each other to work together to identify a solution. It was reported that this **trust** was critical as it enabled both the monitors and the duty-bearer to confront the foreman together. The monitors also respected the Village Administrator due to her previous years of experience and skills. The close engagement and collaborative approach, enabled due to the **mutual trust** and **human capacity**, was seen as critical to problem resolution.

Four other factors are consistently identified as interconnected to this pathway. Collaboration, governance, informed citizen-led action and social incentives also work together to enable problem resolution. The Anonymous Secondary School case in Box 4 highlights how several factors interlink to achieve problem resolution.

Box 4 Anonymous Secondary School (WSS1)

Anonymous Secondary School (WSS1, Afghanistan, SHINE): Mutual Trust AND Human Capacity AND Collaboration AND Governance AND Informed Citizen-led Action AND Social Incentives

The Integrity Club identified that the school toilets were not usable and the walls around the toilets were collapsing. The students reported the problem to the school management through the JWG. The JWG was used to discuss the problem with the principal and the Directorate of Education (DoE). The Integrity Club worked with the school administration to engage with the DoE to advocate for the toilets to be fixed. The toilets were fixed through funding from an external source (a charity) and were not funded by the Ministry of Education (MoE).
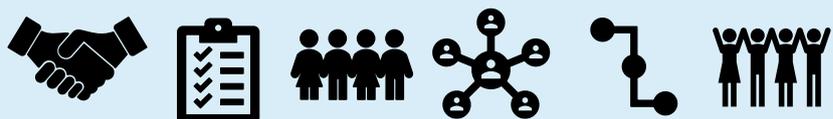
In the case of Anonymous Secondary School WSS1, mutual trust and human capacity have enabled additional factors to achieve problem resolution. The school principal and the monitors **trusted** each other to work together and pressure the DoE to fix the toilets so they can be used. The regular interactions (**intensity and frequency of action**) and proximity of the principal to the monitors (**governance**) helps to build **mutual trust**. The **trust** between both parties also enables further **collaboration**. Additionally, both the principal and the students reported that **social incentives** further catalyse problem resolution as there are **social benefits** to working to

solve problems and there would be negative consequences if the DoE did not work with the students and community to fix problems.

The following representation of this causal pathway highlights how mutual trust and human capacity, along with other factors, work together to lead to problem resolution in the 11 solved cases:

Figure 5.4: Mutual Trust AND Human Capacity causal pathway
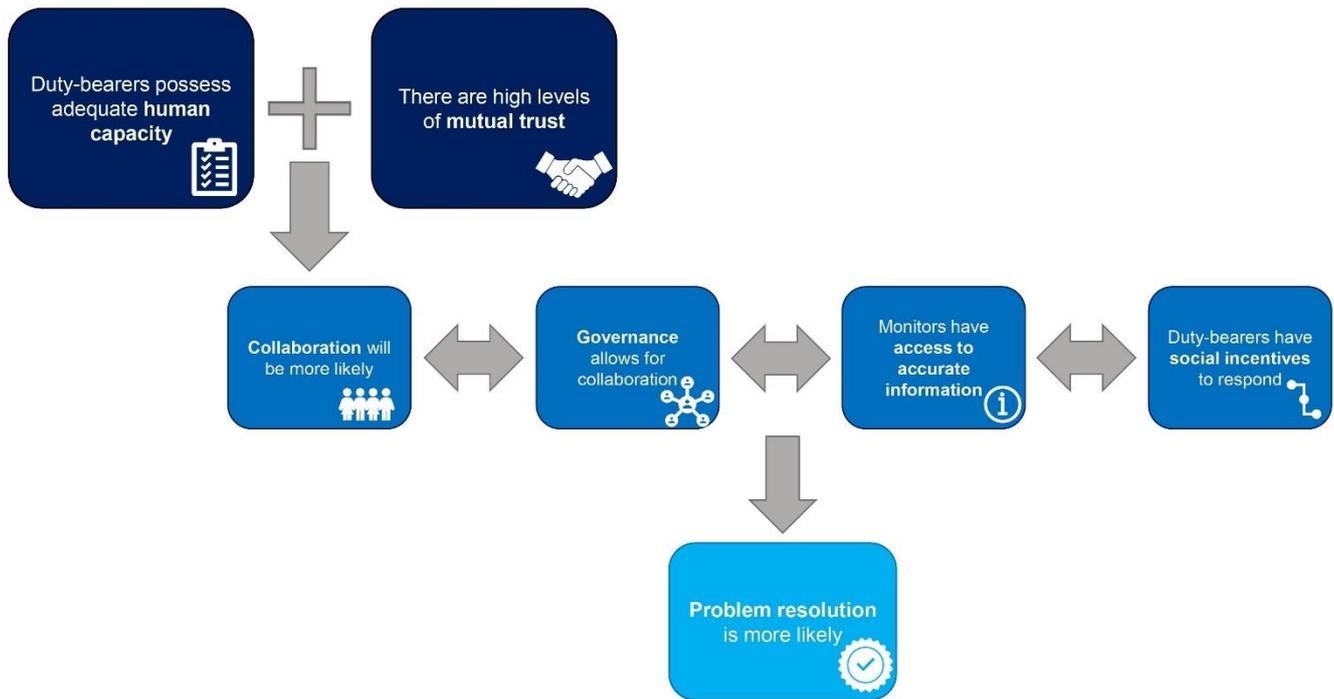
5.2.2   Solved but not relevant

One solved case does not align with the pathway (Table 5.3). In this case, **social incentives** and **financial resources** were identified as working together more closely to solve the problem than **mutual trust** and **human capacity**.

- **Qalqiliah Females Club – Project of the Children Garden and Equipment 1 (QCF1)**: The problem related to the lack of specified entrances for people with disabilities into an educational space within a zoo. Both the monitors and the Mayor (duty-bearer) noted that levels of **mutual trust** were adequate, and the Mayor recognised the urgency of the problem and therefore engaged with the monitors and assigned a contractor to create sufficient entrances. However, **social incentives** and **financial resources** worked together more closely to solve this problem. The monitors noted that **social incentives** played a large role as all public parks and buildings have to be accessible to people with disabilities by law. If the Mayor had not responded then there would have been negative consequences, both in terms of reputational damage and legal issues. **Financial resources** were made available because of the high importance of the problem and the issue was subsequently fixed.

5.3 Mutual Trust AND Financial Resources

This section investigates the relevance of the Mutual Trust AND Financial Resources pathway to achieving problem resolution. QCA generated 16 cases as relevant to this pathway: 11 solved cases and 5 unsolved cases. Table 5.3 below highlights which cases have been judged to be relevant and not relevant for this pathway through within-case analysis.

Table 5.3: Mutual Trust AND Financial Resources cases

Solved and relevant	Solved but not relevant	Unsolved
• Construction of the Collection Rice Centre at Vanga Village 1 (RCVV1) • Ateel Club for Females – Project of the Rainwater Assembly System 1 (ACF1) • Qalqiliah Females Club – Project of the Children Garden and Equipment 1 (QCF1) • Anonymous High School 1 (MRS1)	• Drilling of Mkwakwani Borehole Water Supply 1 (MBWS1) • Construction and Rehabilitation of Majimoto Hot Springs Ecosystem 1 (MHS1) • Construction of Ganze ECDE 1 (CGECDE1) • Construction of Magwagaru ECDE 1 (CMECDEX1) • Construction of ECDE Dzivani 1 (CDECDE1) • Construction of Mtsahuni ECDE 1 (CMECDE1) • Construction of Mnyenzeni Primary School 1 (CMPS1)	• Drilling of Mkwakwani Borehole Water Supply 2 (MBWS2) • Construction and Rehabilitation of Majimoto Hot Springs Ecosystem 2 (MHS2) • Construction of Ganze ECDE 2 (CGECDE2) • Construction of the Collection Rice Centre at Vanga Village 2 (RCVV2) • Construction of Mnyenzeni Primary School 2 (CMPS2)

Mutual trust does not consistently work together with financial resources to solve problems. Mutual trust between citizens and duty-bearers is a very relevant factor across most cases that, when present, often leads to problem resolution. In cases where the duty-bearer and monitors have a close relationship, and where both stakeholders noted that **mutual trust** exists, problems are more likely to be solved. This close relationship between both stakeholders is catalysed further by the duty-bearer's ability to engage with the monitors and find a solution. On the other hand, the availability of **financial resources** was reported by duty-bearers as an important enabler to resolve problems; however, it is not always the case that the presence of **financial resources**, along with the presence of **mutual trust**, leads to problem resolution.

- In many of the cases – particularly in Kenya – the duty-bearer possessed adequate **financial resources** and **mutual trust** between both parties was seen as high, but several problems remained outstanding.
- For the problems that were solved, monitors and duty-bearers highlighted that **financial resources** were not a resolving factor as, in many of the cases in Kenya, fixing the problem did not require additional financial resources.
- In Afghanistan, in most of the cases (even those cases where the problem was solved) the duty-bearer had inadequate **financial resources**. Fixing the problems relied on the action of the students and the principals, rather than the duty-bearers' possession of adequate financial resources.

Consequently, this pathway has been deemed not relevant across the majority of cases as both factors do not consistently work together closely to resolve problems.

5.4 Informed Citizen-led Action AND Collaboration AND Financial Resources

This section investigates the relevance of the Informed Citizen-led Action Pathway AND Collaboration AND Financial Resources pathway to achieving problem resolution. QCA generated 15 cases as relevant to

this pathway: 10 solved cases and 5 unsolved cases. The table below highlights the cases judged to be relevant and not relevant for this pathway through within-case analysis.

Table 5.4: Informed Citizen-led Action AND Collaboration AND Financial Resources cases

Solved and relevant	Solved but not relevant	Unsolved
• Ateel Club for Females – Project of the Rainwater Assembly System 1 (ACF1) • Qalqiliah Females Club – Project of the Children Garden and Equipment 1 (QCF1) • Anonymous High School 1 (MRS1)	• Drilling of Mkwakwani Borehole Water Supply 1 (MBWS1) • Construction of Ganze ECDE 1 (CGECDE1) • Construction of the Collection Rice Centre at Vanga Village 1 (RCVV1) • Construction of Magwagaru ECDE 1 (CMECDEX1) • Construction of ECDE Dzivani 1 (CDECDE1) • Construction of Mtsahuni ECDE 1 (CMECDE1) • Construction of Mnyenzeni Primary School 1 (CMPS1)	• Drilling of Mkwakwani Borehole Water Supply 2 (MBWS2) • Construction and Rehabilitation of Majimoto Hot Springs Ecosystem 2 (MHS2) • Construction of Ganze ECDE 2 (CGECDE2) • Construction of Mtsahuni ECDE 2 (CMECDE2) • Construction of Mnyenzeni Primary School 2 (CMPS2)

Financial resources do not consistently work with informed citizen-led action and collaboration to solve problems. Monitors' ability to **access information** of specific entitlements, legislation and rights has enabled the reporting of problems, leading to **informed citizen-led action**. The possession of **accurate information** in relation to problems regarding service delivery also allows monitors and duty-bearers to **collaborate** to find potential solutions. Duty-bearers noted that when monitors possess **accurate information**, **collaboration** to find a solution is more likely due to the importance of a strong understanding of why the problem exists. However, for many of the cases, duty-bearers were not required to use their **financial resources** to solve problems.

Box 5 below provides a summary of a case that highlights how **informed citizen-led action**, **collaboration** and **financial resources** do not consistently work together to resolve problems.

Box 5 Construction of Mnyenzeni Primary School (CMPS1)

> **Construction of Mnyenzeni Primary School (CMPS1, Kenya, VOICE): Pathway not relevant**
>
> The community monitors identified that the subcontractor assigned to construct the school had significantly delayed the delivery of construction materials. The contractor was identified as being slow in delivering construction materials and this problem was reported to the Village Administrator (the duty-bearer). The monitors identified the problem using the Bill of Quantities. The duty-bearer confirmed that the monitors were correct, and the subcontractor had delayed the completion of the school and pressured the subcontractor to work at a faster pace and deliver all materials needed.

In the case of the **Construction of Mnyenzeni Primary School (CMPS1)**, **informed-led citizen** action was very relevant: monitors were equipped with information that enabled productive engagement with the duty-bearer. In Kenya, the Bill of Quantities serves as an accountability tool for monitors as it provides a comprehensive oversight of the construction process, including the timeline and materials to be used. Subcontractors are also required to sign the Bill of Quantities, making this document a formal agreement between the duty-bearer and the subcontractor. As monitors were informed about the issue, **collaboration** was possible as monitors were able to approach the Village Administrator and identify a solution through the JWG meeting. The level of **collaboration** was reported as high by both the duty-bearer and the monitor as all stakeholders worked together to pressure the contractor to resolve the problem. However, the availability of **financial resources** is not relevant in this case; the

contractor had already been paid in full for the construction and the resolution did not involve the **financial resources** of the duty-bearer. The resolution of this problem was caused by the monitors and the Village Administrator coming together to discuss the problem and pressure the subcontractor to work at a faster pace to complete the project.

Consequently, this pathway has been deemed not relevant across the majority of cases as both factors do not consistently work together closely to resolve problems.

5.5 Unsolved cases where pathways are relevant

Investigating the unsolved cases that have been generated through QCA as relevant to the two pathways (Informed Citizen-led Action AND Human Capacity and Mutual Trust AND Human Capacity) provides further insight into the relationship between factors achieving problem resolution. Table 5.5 below highlights the relevance of the pathways to the four unsolved cases and the corresponding outcome scores. The two pathways below are included in this analysis as they were found to be the most relevant pathways.

Table 5.5: Unsolved cases where the pathways are relevant

Cases	Informed Citizen-led Action AND Human Capacity	Mutual Trust AND Human Capacity	Outcome score
Construction and Rehabilitation of Majimoto Hot Springs Ecosystem 2 (MHS2)	X	✓	0.8
Construction of Ganze ECDE 2 (CGECDE2)	✓	✓	0.8
Construction of the Collection Rice Centre at Vanga Village 1 (RCVV1)	✓	✓	0.6
Construction of Mnyenzeni Primary School 2 (CMPS2)	✓	X	0.8

All unsolved cases have a high outcome score, meaning each problem is close to being resolved. The pathways and factors present are therefore still relevant to working towards problem resolution. The cases are unsolved due to timing issues, yet evidence suggests the pathways are still evident. These cases demonstrate the trajectory of the process of problem resolution, where the factors work together towards problem resolution even if the outcome has not been achieved.

5.6 Other relevant factors

Monitors' perception and knowledge of who is responsible for both protecting citizens' rights and entitlements and for solving the problems is a clear factor affecting problem resolution. In cases where monitors did not know who was directly responsible for solving problems, and where **governance** systems did not enable clear lines of accountability and responsibility, problem resolution was not likely to occur.

- **In Afghanistan, students consistently reported that it was not clear who was ultimately responsible for solving the problems identified.** On the one hand, the principal is responsible for all the students and the running of the school; the principal is the head of the school administration. Principals viewed themselves as responsible for solving 'local' problems, but often deferred to higher levels of authority for more systemic issues, for example the lack of classroom resources. The principal was seen as a close

ECORYS ▲ | Answering tomorrow's challenges today

partner of the monitors, and the DoE was also seen as trustworthy and responsive. The DoE regularly engaged with the students during JWG meetings and would contact the MoE if required. However, the MoE was seen as distant and disengaged and monitors were not aware of a contact in the Ministry that had the responsibility of overseeing the schools. Although the principal and the DoE are both integrated into the community, both admitted that there are types of problems that cannot be solved without the involvement of the MoE.[11] As such, this complex relationship between the students, the school principal, the DoE and the MoE is a barrier to building mutual trust and collaboration, which are critical for problem resolution.

- **In Palestine, monitors reported that the Municipality was responsible for solving the problems identified; however, it was not clear who in the Municipality would ultimately work with the monitors to achieve a positive outcome.** In several cases, a representative of the Municipality engaged with the monitors, but this was not always meaningful nor productive because of a disagreement of who was ultimately responsible. In one case, the monitors reported a problem relating to the presence of dangerous materials due to construction work. When the problem was reported, the Municipality declared that it was the responsibility of the subcontractor to solve the problem and would therefore not intervene. The problem remains outstanding due to the lack of willingness of the municipality to engage with the subcontractor and because of the lack of clarity of who is ultimately responsible for solving the issue.

- **In Kenya, however, there was a clear understanding of who could be approached to solve problems with service delivery.** Due to the decentralised nature of the country, the administrative infrastructure cascades down to local levels which enables monitors to engage closely with the relevant authority. The clear lines of accountability in Kenya consistently supported problem resolution.

5.7   Country case studies

---

[11] See Section 5.9.2 for more information on how the type of problem affects problem resolution.

Affghanistan

Context

The country is struggling with service delivery challenges around education-related resources and infrastructure provision. These challenges have been exacerbated by the long-running conflict in Afghanistan, which has heightened financial constraints around service provision.

The centralised education system in Afghanistan has meant that there are multiple levels of duty-bearers - the principal as the main immediate duty-bearer, the Directorate of Education as the regional representative, and the national Ministry of Education as the ultimate duty-bearer.

The multiple lines of responsibility has resulted in a lack of accountability, particularly at the Ministry of Education level. Projects underscore a lack of knowledge on who was ultimately responsible for problems being resolved.

Stakeholders

- ▶ **Monitors** – school students who identify and escalate issues to the relevant duty-bearers.
- ▶ **Duty-bearers** – the principal is the main immediate duty-bearer across cases.

The cases

4 projects under the SHINE initiative – students monitor issues relating to construction and infrastructure projects.

Anonymous Secondary School: There was a lack of clean water provision in the school (solved), and insufficient textbooks for students (unsolved).

School administrators and Integrity Club members worked together to launch a successful fundraising campaign inviting donations, which raised sufficient funds. The Directorate reported that the scale of the problem was too large to procure the necessary textbooks immediately.

Anonymous High School: Students were unable to use the school toilets due to their dilapidated and unsafe conditions (solved). There was also the need for a yet unbuilt conference hall for trainings and events (unsolved).

Advocacy efforts by the citizen monitor and Joint Working Groups to duty-bearers resulted in fund allocation to the school to fix the problem. The construction work had been promised, but because of COVID-19, the work had been delayed.

Anonymous High School: The school had insufficient bathrooms (solved). The monitor highlighted that there was insufficient clean drinking water for students (unsolved).

Advocacy efforts which brought together stakeholders in the Joint Working Group successfully identified and lobbied a charitable foundation to fund and solve the problem. The DoE reported that first problem was prioritised due to the need to prevent the outbreak of disease.

Anonymous Secondary School: The school bathrooms were not usable, with collapsing walls around the bathroom facilities (solved). There were also insufficient classrooms, with students having to sit outdoors to learn (unsolved).

The Joint Working Group was used to discuss the problem with the principal and Directorate which resulted in funding allocated through a charity for the problem to be solved. The lack of classrooms was reported as a systemic issue by the Directorate, which has not been prioritised by the Ministry of Education.

Lessons from cases

School students and principals have a strong connection, and often work together to identify problems. The monitors of Integrity Clubs highlighted that principals are trustworthy and consistently engage with them to identify any problems that need fixing. As highlighted in the quote below, principals accept full responsibility for the school, but are not always able to solve the problems themselves due to the **scale of the problem.**

Due to the close engagement between monitors and the principals, there were high levels of **mutual trust**. There tended to be high levels of trust between the community, and the principal and the Directorate of Education. This **close partnership** is highlighted by one case, where the community, school and monitors worked to raise funds to solve the problem. Lower levels of trust were reported between the community and the Ministry of Education. Stakeholders noted however, that levels of mutual trust were constantly in flux; with community trust waning when problems are left outstanding.

The governance system of the education sector makes it difficult for monitors to know who is directly responsible. Monitors consistently reported that they did not always understand who was responsible for solving the problems reported. Although the school principal accepts responsibility for the school, problems that are at a larger scale and require input from the Ministry of Education often remain unsolved.

The Joint Working Groups were noted to be very useful. They functioned as a vehicle for advocacy efforts, with the problem reported and escalated to school management through these meetings in several instances.

Important factors affecting problem resolution

- ▶ **Scale of the problem:** Smaller-scale problems which could be resolved at the level of the principal and the Directorate were more likely to be solved. Larger-scale problems that were believed to be systemic and indicative of the lack of prioritisation by the Ministry of Education remained unsolved.

- ▶ **Human capacity** of the principal and the Directorate to be able to work with the school monitors to identify problems and report. Conversely, the lack of human capacity of the Ministry of Education was seen as a barrier to problem resolution.

- ▶ **Collaboration** is possible between the school monitors and the principal. The Directorate is often collaborative, but the Ministry is seen as confrontational or non-responsive.

- ▶ **Perception of who is responsible:** Monitors noted that relevant points of contact within the Ministry of Education were unclear and the right stakeholders could not be reached. The lines of accountability to fix problems was often unclear.

Integrity Action Partner: Integrity Watch Afghanistan (IWA)

"I have to refer the problem to upper-level officials [...] when there is a larger-scale problem. Problems that are on a smaller scale [can] be solved on the school level or the community."

- School Principal in Afghanistan

Kenya

Context

The devolved governance system in Kenya means duty-bearers are integrated into the community. Village Administrators represent the Kwale County Government and have the agency and responsibility to solve problems identified by citizens. Project Management Committees and Project Implementation Committees also oversee construction projects and work with the Village Administrator and community to identify and solve problems.

Subcontractors tasked with delivering the projects are often the causes of problems related to service delivery.

Construction projects are outlined by a contractual agreement known as a Bill of Quantities. This is a key public document and is a mechanism for monitors to access information regarding the projects.

Stakeholders

▶ Monitors – adult community members in Kwale County elected by their community.

▶ Duty-bearers – the Village Administrator is the main duty-bearer and is seen as a representative of the Kwale County Government.

▶ Subcontractor in charge of construction works – often participating in problem resolution, especially if responsible for the overall construction project.

The cases

8 projects under the VOICE (Students Acting for Honesty, Integrity and Equality) initiative – community representatives monitor issues relating to construction and infrastructure projects.

Drilling of Mkwakwani Borehole Water Supply: the project stalled due to a lack of adequate and timely supply of construction materials (solved), but no project management committee had been established for the work (unsolved).

Construction and Rehabilitation of Majimoto Hot Springs Ecosystem: there was no Project Management Committee in place (solved) and the construction work was delayed due to the subcontractor absconding from the work (unsolved).

Construction of Ganze ECDE: the school construction work had been completed but parents did not feel confident to return their children to school (solved). Monitors noticed that the materials to make doors to the school were not what were specified in the Bill of Quantities (unsolved).

Construction of the Collection Rice Centre at Vanga Village: the subcontractor had not provided security for the construction materials, which were at risk of being stolen (solved). Electricity had not been installed because the subcontractor caused delays with the construction (unsolved).

Construction of Magwagaru ECDE: the monitors identified that the subcontractor had been using low quality poles for the roof (solved) and that the pit latrine was not the required depth (unsolved).

Construction of ECDE Dzivani: the monitors identified that the subcontractor was using soft-wood timber rather than high-quality hard wood timber (solved) and that the pit latrine was not the required depth (unsolved).

Construction of Mtsahuni ECDE: the subcontractor did not clear the bush, which inhibited the workers' safety (solved) and the monitors noticed the subcontractor used the wrong type of poles to complete the school construction (unsolved).

Construction of Mnyenzeni Primary School: monitors reported that the subcontractor had delayed the delivery of construction materials (solved), but this caused delays in the completion of the work (unsolved).

Lessons from cases

The relationship between the monitors and the Village Administrators was very strong because of their integration into the community. As highlighted in the quote below, duty-bearers were very positive about the monitors and see them as important stakeholders in ensuring service delivery projects follow requirements and agreements as set out in the Bill of Quantities. Community monitors regard the Village Administrators as very capable duty-bearers that are skilled at working to solve problems identified.

The cause of the problem is important in this context. When the problem is caused by the subcontractor, monitors and the Village Administrators often work together closely to ensure the problem is fixed by the subcontractor. The subcontractor as the cause of the problem brings the monitors and duty-bearers closer together as they work to pressure them to solve the issues they have created, enabling further collaboration.

Project Management Committees and Project Implementation Committees represent enabling governance structures that help to catalyse collaboration between all stakeholders. Village Administrators highlighted that meetings held by the two committees enable close engagement with the community. This is further strengthened through Joint Working Groups.

The Bill of Quantities is consistently used by the monitors as an accountability mechanism. The importance of the Bill of Quantities to solving problems in Kenya highlights the central role of information in social accountability. Monitors are able to identify that problems exist using this publicly available contract and use this to engage with the Village Administrator.

Important factors affecting problem resolution

▶ Human capacity of the Village Administrators, to be able to enforce a subcontractor to comply with obligations and engage consistently with monitors and relevant stakeholders to resolve a problem.

▶ Mutual trust between duty bearers and monitors due to the close engagement and integration into the community.

▶ Collaboration is enabled because of the mutual trust between monitors and the Village Administrators. Both work closely together to solve problems identified.

▶ Governance system in Kenya is devolved, enabling the Village Administrator to have responsibility and agency to solve the problem. More senior County Government officials are included in the process when needed.

▶ Informed citizen-led action is vital to drive the process of problem resolution forward. The Bill of Quantities is regarded by monitors as fundamental to raise problems to the Village Administrator and helps to put pressure on subcontractors to solve issues identified.

Integrity Action Partners: Kwale Youth Governance and Consortium (KYGC) and Kwale County Natural Resources Network (KCNRN)

"Monitors are critical partners in development."
- *Village Administrator, Kwale County*

Palestine

*Source: Integrity Action (2021)*

Context

The complex political situation significantly affects duty-bearers' abilities to resolve problems and respond to citizens' demands. For example, the Israeli occupation imposes restrictions and regulations on the municipality, including on the delivery of goods. This can often have an impact on the availability of resources for subcontractors and can caused significant delays to project completion.

The **governance system is fairly centralised.** The municipality has limited resources to address problems. Local authorities do not consistently engage with their communities. Communities perceive local authorities as corrupt or driven by political gains. The relationship between representatives of the municipality and their communities is characterised by confrontation. There are limited mechanisms for citizens to raise problems. Where these exist, they are often inefficient or not widely known.

Stakeholders

- ► **Monitors** – student members of Integrity Clubs established in each school or community club
- ► **Duty-bearers** – mayor, or engineer assigned to represent the municipality when the mayor is unavailable
- ► **Subcontractor** in charge of construction works – often participating in problem resolution, especially if responsible for the overall construction project

Source: Integrity Action (2021)
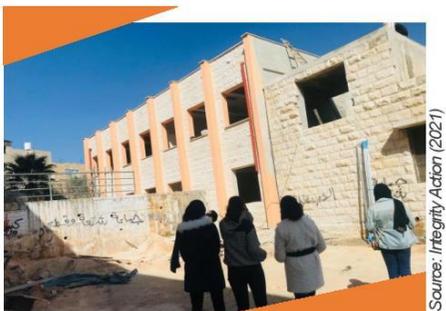
The cases

4 projects under the SHINE (Students Acting for Honesty, Integrity and Equality) initiative – students monitor issues relating to their school or club, including construction work, resources and performance.

Ateel Club for Females reported an open pit at the exit of rainwater collection network (solved) and dangerous equipment (unsolved), nearby a secondary school and children's playground.

After a joint visit to the site and a meeting with the mayor and monitors, the municipality hired a contractor to close the pit.

Tulkarem Females Club reported missing pedestrian lines and warning signs on a street near a primary school, (solved) and missing sidewalks (unsolved).

After a joint visit with the engineer, the municipality allocated funds to solve the first problem, but there was less cooperation to share information to solve the second problem.

Tulkarem Males Club reported the presence of equipment obstructing works (solved) and delays in delivering materials to complete the solar energy project (unsolved).

After a meeting with the municipality, the monitors visited the site with the engineer and the contractor, who agreed to remove the equipment. Delivery of materials depends on Israeli customs, which are outside the scope of the municipality.

Qalqiliah Females Club reported a lack of entrance for people with disabilities to a children garden in construction (solved), and dangerous equipment left on the site (unsolved).

After a joint visit to the site with the engineer, the Integrity Club organised an accountability session with the mayor, which led to a solution being identified. Dangerous equipment remains because the contractor has not removed it.

Lessons from cases

Generally, the relationship between monitors and duty-bearers is not particularly strong. For example, monitors and the wider community have limited trust in the mayor's promises to solve problems, as they are often not fulfilled. Community members report that they struggle to engage with duty bearers through existing mechanisms to raise problems.

Accountability meetings between duty-bearers and Integrity Clubs can be an effective alternative. These were characterised by collaboration and transparency, which strengthened the relationship between duty bearers and monitors. Duty bearers reported that this approach created a positive environment to discuss responsibility and solutions, which resulted in the problem being resolved.

The relationship can also become more collaborative, if the mayor is not directly involved and assigns a competent representative to step in as duty-bearer (engineer). **Joint visits** with the engineer to the site of the problem helped monitors substantiate their claim and gather additional information to advocate for a solution.

The municipality can prioritise its human and financial resources, albeit stretched, to resolve problems where these fall directly under its responsibility – compared to problems that require cooperation from external stakeholders, like Israeli authorities.

Social and political incentives can also motivate duty-bearers to prioritise problem resolution, if it means preserving the municipality's reputation and improving the relationship with the community.

Important factors affecting problem resolution

- ► **Human capacity** of the duty-bearer, to be able to enforce a contractor to comply with obligations (through informal conversations) and and divert resources (staff or funding) to resolve a problem.
- ► **Mutual trust** between duty bearers and monitors, that the duty-bearer acts in the interest of the municipality and that monitors report problems accurately to the responsible stakeholders.
- ► **Social and/or political incentives** for duty-bearers in small communities to resolve issues, for example, better relationship with the community and likelihood of re-election and reputational gains with donors.
- ► **Perception of responsibility:** duty-bearers do not engage consistently with the monitors, especially if they do not believe it is their responsibility to solve the problems identified. Some duty-bearers were not willing to pressure sub-contractors to fix problems, which negatively impacted monitors' trust and limited their understanding of who is ultimately responsible for problem resolution.

Integrity Action Partner: Palestinian Centre for Peace and Democracy (PCPD)

"The Municipality only has the main staff to provide services, but it is not able to cover all projects and solve all reported problems in a short time with limited human capacity."
- Engineer, Ateel Municipality

5.8   Differences of pathways

Investigating whether there are differences in the relevant causal pathways across type of citizen, type of duty-bearer and type of problem helps to uncover important nuances that may impact the achievement of problem resolution. The following two subsections assess to what extent the pathways vary between the type of citizen and the type of problem. Nuances relating to the type of duty-bearer are provided in the country case studies (see Section 5.7).

5.8.1   Type of citizen

Factors and pathways leading to problem resolution differ between type of citizen. Type of citizen, in relation to this study, refers to the monitors that are engaged through Integrity Action's various initiatives. For the cases relating to the VOICE initiative, the monitors are adult community members that have been elected by the community to oversee project delivery and construction work. For the cases related to the SHINE initiative, monitors are school students or young people who are part of the Integrity Clubs established in each school or community club. These types of citizens monitor a wider range of issues relating to the school or club, including construction work, resources and performance.

Adult community citizens

The factors that were consistently reported by adult community members as playing a large role in problem resolution and thus positively affecting the outcome were: human capacity, mutual trust, collaboration, governance, informed citizen-led action and intensity and frequency of action. Community members highlighted the importance of duty-bearers possessing the capacity to engage with the process of problem resolution and the trust between the citizens and local administrative unit to solve problems. As such, the **mutual trust** and **human capacity** pathway is very relevant for community members with an integrated duty-bearer that holds responsibility to find a solution where possible.

Community members engaged through VOICE consistently highlighted the importance of possessing knowledge about the progress of projects and using this knowledge to engage with duty-bearers. Understanding what was promised to the community in terms of infrastructure and service delivery projects motivated monitors to identify problems relating to the projects. The opinion of community citizens was more negative towards subcontractors than duty-bearers as many of the problems had been caused by the subcontractor. Community citizens' negative attitudes towards the third-party service providers enabled further collaboration with the duty-bearers, as both could work together to pressure subcontractors to solve the problems and deliver the projects promised to them.

School students and young people

For school students and young people, their context changes the importance of some of the factors and the pathways to achieve the outcome. As highlighted in the country case studies (see Section 5.7), in Afghanistan, the school students work closely with the principals to identify solutions to the problems. Yet, due to the **governance** arrangements in the country, the principals do not consistently have the **resources** nor responsibility to solve all problems identified. As such, problem resolution often relies on the action of the MoE rather than the close relationship and **collaboration** between the school students and principals. Additionally, the school students often reported that there was a lack of understanding regarding who was ultimately responsible due to the complex accountability lines within the education sector. In Palestine, the Integrity Club members often have a more confrontational relationship with the duty-bearers due to the lack of integration of the duty-bearer and the unwillingness to solve many of the problems identified.

The two Integrity Action initiatives reviewed in this study (VOICE and SHINE) include differing activities which can account for the variety of factors and pathways leading to problem resolution across types of citizens. For example, under the VOICE initiative, activities relate to holding local administrative/governance systems accountable through understanding whether systems are supporting the timely delivery of services and

providing information regarding citizens' rights. The SHINE initiative emphasises a softer approach to accountability, to give students the opportunity to improve their school (see Section 2.2). As such, the experience of students and young people engaging with duty-bearers can be less confrontational as issues of accountability and citizens' rights are not at the forefront.

5.8.2   Type of problem

The complexity, scale and framing of the problem impacts problem resolution.

Complexity of problem

- **Some duty-bearers noted that various problems require complex solutions and need a longer timeframe to solve.** As such, certain factors can help to solve problems, such as **mutual trust** and **human capacity**, but achieving the outcome can often require including a variety of relevant stakeholders due to complex situations and therefore take a longer timeframe. In Palestine, for example, duty-bearers highlighted that often subcontractors work on several projects with competing deadlines, meaning pressuring them to solve an issue immediately could have knock-on effects for other projects and stakeholders. In Kenya, some problems remain outstanding as they require more specialised materials that were not available to the duty-bearer. For example, when drilling a bore hole, the materials that were provided were not adequate to cut through the hard rock formation. Although this was an unforeseen challenge, more support could have been provided by the Country Government to equip the subcontractor with the specialised materials needed to complete the project.

Scale of the problem

- **Some problems were seen as smaller, localised problems and therefore easier to solve than others, which positively affected the outcome.** Problems that are localised and straight forward (e.g. clearing the bush in Mtsahuni ECDE) are easy to identify and the configurations of factors identified often lead to problem resolution (**mutual trust** and **human capacity**). Many of these local problems were caused directly by the subcontractor trying to cut corners and did not involve other stakeholders. Therefore, the monitors and duty-bearers were able to work together to intervene, pressure the subcontractor and solve the problem.
- **Where the scale of the problem is much larger, problems tend to remain unsolved.** In most cases, the duty-bearer did not need to use financial resources to solve the issue as the problems were seen as localised issues that did not need additional finances and could be fixed with little external intervention. In some cases, however, problems were on such a large scale that they went beyond the duty-bearers' budget availability and were not priorities for the government to fix. In Afghanistan, for example, some problems had not been solved because they were seen as national problems, such as the lack of classroom resources. The DoE noted that the government does not allocate enough budget to solve education-related issues, which is why they become systemic across the country.

Framing of the problem

- **The framing of problems can help to achieve problem resolution.** Monitors noted that duty-bearers would be more responsive to finding a solution depending on how the problem was framed. If problems were communicated as urgent and it was clearly demonstrated to the duty-bearer why it was necessary for the problem to be solved in a short timeframe, then problem resolution was more likely. In Afghanistan, for example, students reported that the school toilets needed to be fixed, but highlighted the risk of disease if problem remained outstanding. The MoE intervened and an external source provided the financial resources to fix the toilets.

ECORYS ▲ | Answering
tomorrow's
challenges
today

5.9   Barriers to problem resolution

There are cases where the outcome is fully absent: where the problem is not resolved, and evidence suggests that no progress has been made to solve the original problem. Understanding what factors are preventing problem resolution complements analysis regarding the factors that lead to duty-bearer behaviour change.

In this section, the unsolved cases where no progress has been made are investigated to provide further insights into the mechanisms leading to problem resolution. Table 5.6 below highlights all cases that have the lowest outcome score.

Table 5.6: Unsolved cases with an outcome score of 0

Cases	Country	Outcome score
Qalqiliah Females Club – Project of the Children Garden and Equipment 2 (QCF2)	Palestine	0
Ateel Club for Females – Project of the Rainwater Assembly System 2 (ACF2)	Palestine	0
Tulkarem Club for Females Project of the Street Paving in Tulkarem 2 (TCF2)	Palestine	0
Anonymous Secondary School (HSS2)	Afghanistan	0
Anonymous High School 2 (QMOS2)	Afghanistan	0
Anonymous Secondary School 2 (WS2)	Afghanistan	0

Two of the problems that remained outstanding related to the duty-bearer not believing it was their responsibility to solve the issue.

- **Qalqiliah Females Club – Project of the Children Garden and Equipment 2 (QCF2):** The problem was caused due to the subcontractor not removing dangerous construction materials. The Mayor highlighted that the subcontractor's contract stated that the materials were required to be moved when the construction work had been completed. The problem remains due to the lack of responsiveness of the subcontractor; however, the Mayor and municipality could have acted to contract a replacement.
- **Ateel Club for Females – Project of the Rainwater Assembly System 2 (ACF2):** In this case, excess materials remained due to the subcontractor. Monitors reported that the problem had not been solved because the duty-bearer did not recognise the issue as important and requiring urgent action. The inaction of the duty-bearer in both cases is the main reason that the problems remain outstanding.

Four outstanding problems remain unsolved due to the size and scale of the problems. As highlighted in Section 5.8.2, the scale of certain problems limits duty-bearers' ability to achieve problem resolution. Summaries of the outstanding problems are provided below:

- **Anonymous Secondary School (HSS2):** The problem relates to the lack of textbooks in schools, which has not been resolved as the DoE highlighted that the issue was a national problem, and the government was not able to solve this nationally, due to the problem not being a priority in the government.
- **Anonymous Secondary School 2 (WS2):** The problem relates to the lack of classrooms in the school, meaning some students are required to take their classes outside. It was reported the problem has been reported to the MoE but has not been solved due to the scale of work needed to create more classrooms.
- **Anonymous High School 2 (QMOS2):** The problem relates to the lack of drinking water for the students and the lack of the government's financial resources to solve the issue. For QMOS1, the solved case, a charitable foundation was able to fund 11 projects and the first problem was prioritised due to the perceived urgency of the problem (the lack of working toilets for the students). QMOS2 has not been fixed because external funding was not available.
- **Tulkarem Club for Females Project of the Street Paving in Tulkarem 2 (TCF2):** The monitors noticed that the construction of pavements had not been completed, meaning citizens had to walk on the road

with busy traffic. The duty-bearer noted that they were not able to solve this problem as resources had already been used elsewhere and the municipality was not willing to prioritise this problem before others.

6.0   Lessons

Relevant research question:

- **Question 3:** What learning can be generated for Integrity Action's programming?

Summary of findings:

- Understanding which configurations of factors – and the relationship between these factors – lead to problem resolution is directly relevant for Integrity Action's logic model underpinning its approach. The factors selected were generated from the Theory of Change, as well as existing literature on social accountability, in order to test the causal assumptions of Integrity Action.
- Integrity Action's initiatives (Integrity Clubs, monitors, JWGs and the DevCheck software) all play an important role in achieving problem resolution. Stakeholders provided positive feedback regarding the initiatives, particularly praising the opportunity for monitors and duty-bearers to work together regarding problems.
- The various initiatives of Integrity Action's approach feed directly into the three main features that the Theory of Change requires to enable social accountability:
   - **Incentives** to act with, and demand, integrity
   - **Mutual trust** between citizens and institutions
   - **Information** that gives citizens leverage
- In the cases analysed by this research, which were primarily within construction projects, these three features correspond with the factors identified as important to lead to problem resolution. However, further work is needed to ensure all relevant stakeholders, including subcontractors and service providers, are able to act with integrity. In cases where the duty-bearer shirks responsibility to solve the problem and does not pressure the contractor to resolve the issue, the monitors and community suffer the negative consequences.
- The pathways leading to problem resolution have highlighted that the proximity of the duty-bearer is an important enabler. In contexts where governance systems do not allow duty-bearers to be localised, the environment for problem resolution to occur is constrained. JWGs provide a potentially sustainable alternative in such contexts, where all relevant stakeholders can collaborate to achieve problem resolution. Such forums will also help to build mutual trust between stakeholders, thus increasing the likelihood of future collaboration despite constraining environments.
- Capacity-building activities with duty-bearers through in-country partners would also help to strengthen the catalytic pathways identified to achieve problem resolution.

This section details the relevance of the findings for Integrity Action's future strategic direction, as well as highlighting feedback from monitors and duty-bearers regarding Integrity Action's initiatives. The final section reflects on Integrity Action's Theory of Change based on the findings of the study.

6.1   Contribution of stakeholders/initiatives to problem resolution

Through extensive analysis of each case, it has been possible to identify the contribution of Integrity Action's initiatives and its partners to problem resolution. This assessment is based on the qualitative data generated through interviews and does not involve a comprehensive contribution analysis across all Integrity Action initiatives. The below subsections highlight the contribution of Integrity Clubs, monitors, DevCheck and JWGs, building on feedback from monitors and duty-bearers.

Integrity Clubs

Integrity Clubs serve as an important forum for students to engage with issues relating to the school and to work collaboratively with other students and the school administration to find a solution. Through identifying student monitors, students reported they feel represented and trust there is a strong connection between the student body and the school staff. Not only do the monitors bring students and staff closer, but it was also noted that monitors gather community support and catalyse community engagement in school issues (see Box 2 in Section 5.1.2 for further). Integrity Clubs, therefore, enable many of the relevant factors found to lead to problem resolution, such as **mutual trust**, **collaboration** (both with principals and the community) and **intensity and frequency of action**.

In Afghanistan and Palestine, where Integrity Clubs were formed under the SHINE project, monitors were able to use these forums as a way of following up with relevant stakeholders to ensure progress was being made. As such, the clubs serve as an accountability tool for students. In contexts where there are several layers of authority for the schools, for example Afghanistan, the clubs serve as useful bridge between the school and the relevant authority (in the case of Afghanistan, the DoE). However, students and principals consistently reported that the lack of connection between the DoE and the MoE was a significant barrier to problem resolution.

Monitors

In the cases of this study, the existence of monitors both in schools and communities is fundamental for problem resolution to occur. Monitors can have responsibility to oversee service delivery and are able to investigate problems, supported by access to accurate information where possible, but are also able to catalyse collaboration between citizens and duty-bearers. In most cases, the role of the monitor is useful to overcome confrontation between citizens and authority representatives, helping to build trust. Having specified members of the community or school to identify a problem also helps strengthen the role of information in the process of problem resolution, as monitors' roles involve accessing information regarding issues (where possible) and then utilising this information as an accountability tool. The role of monitors enables many important factors for problem resolution, such as:

Mutual trust

Social incentives

Intensity and frequency of action

Collaboration

Informed citizen-led action

Duty-bearers highlighted the benefits of engaging with monitors. In Palestine, for example, a Mayor explained that engaging with the monitors helped to build a connection between central authority figures and communities. Through speaking with representatives of the community, the Mayor believed the relationship with citizens was strengthened. Additionally, the corresponding monitor highlighted that engaging with the Mayor and Municipality gave her a sense of ownership and responsibility and she was determined to ensure her community's voice was heard.

However, further work could be done to manage the expectations of monitors. Although engaging with monitors is both a useful and important exercise, it was highlighted that monitors often have preconceived ideas regarding problem resolution that are unrealistic. Activities that bring duty-bearers and monitors together more

ECORYS | Answering tomorrow's challenges today

frequently, where monitors can understand the processes and stakeholders involved in problem resolution, would help to build monitors' knowledge and expertise.

Joint Working Groups

Joint Working Groups (JWGs) involve monitors, together with other relevant stakeholders and duty-bearers, thereby encouraging citizen engagement and ensuring the duty-bearer perceives citizens as a relevant and important group regarding development projects. JWGs are a further catalyst to citizens being integrated into decision-making and holding authority figures accountable. Through JWGs, monitors and duty-bearers can **collaborate**, building **increased trust**, and can be a forum where **accurate information** regarding an issue can lead to problem resolution.

Duty-bearers reported that they valued closer engagement with monitors when trying to resolve problems, and JWGs serve as a tool to build collaboration and create a space for engagement between all groups. Discussing problems with relevant stakeholders enables the resolution of problems to be collaborative and not confrontational. In some cases, JWGs encourage more senior authority figures to participate due to the formal nature of the meetings. In Afghanistan, there were cases where this helped to resolve the problem.

JWGs, therefore, are vital platforms in bringing stakeholders together to discuss problems that have been identified and work towards solutions. In contexts where governance systems do not allow for localised or integrated duty-bearers in the community (for example Kenya), JWGs can play an important role in enabling the factors identified as catalytic to problem resolution.

DevCheck

DevCheck was regarded as a vital platform for monitors to both raise problems and engage with duty-bearers. The application serves an accountability tool, as specific **information** regarding projects can be easily uploaded and later used to highlight problems that need the attention of relevant stakeholders. Importantly, monitors highlighted that DevCheck enhanced the seriousness of the role of the monitors and strengthened their ability to engage with senior stakeholders. It was not clear whether duty-bearers view the DevCheck application as a useful tool for them to engage with monitors and resolve problems.

Duty-bearers

Duty-bearers are crucial stakeholders in the process of problem resolution. Both monitors and duty-bearers have critical roles throughout the trajectory of problem resolution. Monitors need to **access information** and report the problem accurately, but also have to trust the duty-bearer to solve the problem and work **collaboratively** with the relevant stakeholders throughout the process. Duty-bearers must trust the monitors and work collaboratively to identify a solution, but they also need to have the **human capacity** to engage in the whole process in a meaningful way.

Although one case was solved through the actions of the monitors and the community, most problems were solved due to the action of duty-bearers. Duty-bearers are reliant on monitors to identify problems with service delivery, but the engagement and action of duty-bearers are essential for problem resolution. The unsolved problems (Section 5.9) highlight that when duty-bearers do not believe it is their responsibility to act or do not have the financial resources to fix a larger issue, problem resolution is unlikely.

Perception of who is responsible and human capacity of duty-bearers are, therefore, important factors that enable problem resolution. Further work could strengthen duty-bearers' capacity and build knowledge across all stakeholders regarding roles and responsibilities. Working with local partners in target countries to engage in capacity building activities with relevant stakeholders would further strengthen Integrity Action's contribution to the process of problem resolution. Working with local partners to understand which institution or specific person is responsible for problem resolution (through a detailed stakeholder mapping) would help to overcome barriers regarding the perception of who is the duty-bearer.

6.2   Reflections on the Theory of Change

Integrity Action's Theory of Change (ToC) is clear and thorough. Details of Integrity Action's strategy and overall approach are provided in Section 2.2. The ToC highlights that the pathways to achieving its stated goal have three key features which reinforce each other:

Incentives to act with, and demand, integrity

- Rules and laws from above and informal pressures from below provide incentives to act with integrity
- Citizens must also be incentivised to raise their voice and increase agency

Mutual trust

- Citizens and duty-bearers must have mutual trust
- A constructive relationship should be built to encourage discussion at both levels

Information that gives citizens leverage

- Information empowers citizens to hold duty-bearers to account
- Information provides an evidence base to increase the potential for positive solutions

The findings of this research are directly relevant for investigating these pathways and the key features that should support each other in contributing towards Integrity Action's goal of a society in which all citizens can – and do – successfully demand integrity from the institutions they rely on. This section unpicks these three features to determine whether the ToC is reflected in the cases covered by this research, and in the pathways generated through QCA.

Incentives to act with, and demand, integrity

Incentives can provide duty-bearers with the motivation to resolve problems. In the cases of this study, social incentives have been a positive enabler that has contributed to problem resolution, working alongside other important factors. **Incentives** can apply to both citizens and institutions; the former being incentivised to demand integrity and the latter to act with integrity.

However, this study has found that the conceptualisation of 'institution' and who is responsible needs to be made more granular. In Palestine, for example, there were cases where the Municipality did not believe they held the responsibility to solve the problem identified. Rather than working with the monitors to pressure the contractor to solve the issue – as was seen in many of the cases in Kenya – the problem remains outstanding. In this case, neither social nor negative **incentives** motivated any institution to act.

There is potential benefit in working with all relevant stakeholders and decision-makers related to projects to increase knowledge about the connection between duty-bearers, contractors and monitors so that incentives to act with integrity exist on all sides. Integrity Action could consider engaging with contractors, monitors and partners to build understanding around the concept of integrity and to identify responsibility, which could catalyse the role of **incentives** throughout the process of problem resolution.

Mutual trust between citizens and institutions

The ToC rightly places strong emphasis on the role of mutual trust in strengthening accountability. The findings of this study demonstrate that **mutual trust** between monitors and duty-bearers was a critical enabler for problem resolution in the analysed cases, and can also be a catalyst for other factors to play a central role in the process. Integrity Action's initiatives help to build **mutual trust** between parties (see Section 6.1).

The cases of this study also highlight that the proximity of the duty-bearer can be an important factor to drive mutual trust. It has been noted that devolved governance systems allow duty-bearers to be integrated into the community, therefore encouraging mutual trust and collaboration. In contexts where mutual trust is lacking, or where there are barriers to building mutual trust, JWGs can provide a useful strategy to bring relevant stakeholders together. If there is little trust between the community and duty-bearers, JWGs can be platforms to enable communication with the aim of increasing trust. Additional work to increase the human capacity of duty-bearers in constraining environments would also help to increase mutual trust (see Section 6.1).

Information that gives citizens leverage

The findings of this study suggest that information can be critical for monitors to understand problems regarding service delivery, especially the construction of public infrastructure, as in the majority of these cases. Possessing accurate information increases the likelihood of problem resolution, as duty-bearers then gain a strong understanding of the issue and can work with the monitors to identify a solution. Accessing information is a critical first step in the trajectory of the problem resolution process and works closely alongside other factors to help increase accountability.

Accessing accurate information regarding service delivery is not possible in all contexts. The monitors in the countries included in this study have, on the whole, been able to access information related to projects. However, in contexts where this is not possible, the DevCheck application is a useful mechanism for monitors to store all available information regarding a problem related to service delivery that could be used to approach duty-bearers and relevant stakeholders, triggering the trajectory of problem resolution.

7.0   Conclusion

This section summarises the findings of this study in relation to the three research questions. Integrity Action staff and its partners were asked to provide their hypotheses as to which combinations of factors would lead to problem resolution, and the most important factors for that. We compare these hypotheses against the study's findings below. Recommendations are then provided to support Integrity Action's use of these findings to inform future programme design and strategic direction.

RQ1: When problems regarding service delivery are raised by citizens through social accountability mechanisms, what are the factors that lead to duty-bearers resolving these problems? What combinations of these factors have been most successful in enabling positive solutions?

Hypothesis: It was widely expected that the capability of the duty-bearer, specifically the availability of financial resources, would be a prerequisite for all problem resolution.

Findings:

- Using QCA, three solutions were generated that identified sufficient combinations of factors that achieved problem resolution: complex, intermediate and parsimonious solutions.
- Within-case analysis of data highlighted that the causal pathways included in the parsimonious solution were the most relevant and had the most explanatory power for all cases.
- Further within-case analysis revealed that two pathways were particularly relevant to explain the causal mechanisms that lead to problem resolution: Mutual Trust AND Human Capacity and Informed Citizen-led Action AND Human Capacity.
- In terms of the hypothesis, while the capability of the duty-bearer is critical, human capacity to engage with the monitors to identify a solution is more important for solving smaller, more localised problems with service delivery. Many of the problems investigated in this study related to granular issues in infrastructure projects that are often caused by the subcontractor. These smaller issues are often solved without the need for further financial assistance. Where problems are larger scale and seen as systemic issues relating to the context in which they are situated (for example over-populated schools), further financial resources are needed to help overcome the problem.

RQ2: What is the relationship between these factors and how do they impact the achievement of positive solutions?

Hypothesis: It was also predicted that open governance systems, allowing for citizen engagement, would provide social and political incentives for duty-bearers to respond to citizen-identified problems.

Findings:

- The two identified pathways were found to be very relevant as the factors demonstrated that the capability and opportunity of the duty-bearers work closely together to achieve problem resolution, and this relationship is strengthened when citizen behaviour is informed by accurate data:
    - Mutual Trust AND Human Capacity is a highly relevant pathway leading to problem resolution. When monitors and duty-bearers trust each other, both collaborate to find a solution to the problem. The presence of human capacity helps to further build mutual trust and enables meaningful engagement. When a duty-bearer has capacity to engage with the monitors, and the monitors trust that duty-bearers will work to achieve positive solutions, a partnership is formed that can lead to problem resolution.
    - Informed Citizen-led Action AND Human Capacity is also a relevant pathway leading to problem resolution. Once a problem is raised by a monitor using accurate information, human capacity is needed for duty-bearers to meaningfully engage with monitors and find a resolution. Both factors work very closely together to resolve problems.
- Although both pathways are sufficient to lead to problem resolution, they are also catalytic pathways that enable other important factors to achieve positive solutions.

ECORYS ▲ | Answering tomorrow's challenges today

- Monitors require access to accurate information to raise a problem, and a duty-bearer's human capacity to engage with the monitors will help to find a solution to the problem. Often, when duty-bearers have human capacity, mutual trust is built. Through this trust, collaboration is enabled; the monitors and duty-bearer work together to find a solution and engage with other relevant stakeholders. Where mutual trust and collaboration are present, there are often social incentives for the duty-bearer to respond to monitors and work to conserve their close relationship and to identify solutions. The existence of devolved governance systems where duty-bearers are integrated into the community and where there are well-established participatory mechanisms help to catalyse problem resolution, especially where monitors use these platforms to discuss problems openly and based on mutual trust.
- In terms of the hypothesis that open governance systems are critical, the study found that where governance systems are more decentralised and the responsibility of the duty-bearer is devolved to the local level and integrated within the community, monitors are able to build stronger relationships and problems are more likely to be solved. Although this does not explicitly signify that devolution creates incentives for duty-bearers to act, it does highlight that further trust and collaboration can be built, which are both sufficient for problem resolution.
- The relevance of the pathways of factors and the importance of factors differed across country contexts:

Kenya

- In Kenya, Mutual Trust AND Human Capacity and Informed-led Citizen Action AND Human Capacity work closely together.
- The Village Administrator (duty-bearer) and the community monitors see each other as 'development partners', both consistently highlighting that they trust each other to work together closely to find solutions to problems. Mutual trust is reinforced as the Village Administrator has the capacity to engage with the monitors to identify, verify and solve problems. When necessary, the Village Administrator will engage the County Government to resolve the problem (usually if the subcontractor needs to be replaced).
- The governance system in Kenya is devolved, enabling the Village Administrator to have responsibility and agency to solve the problem. This builds a strong relationship between the duty-bearer and the monitors, where both parties respect each other and are seen as 'critical partners in development'.

Palestine

- In Palestine, Mutual Trust AND Human Capacity work quite closely together, but Informed-led Citizen Action is less relevant.
- Due to the governance infrastructure, the duty-bearer is not as integrated into the community, impacting the mutual trust between monitors and duty-bearers. This also impacts monitors' access to information and understanding of who is ultimately responsible for problem resolution.
- The perception of responsibility is a barrier to problem resolution in this context. Duty-bearers do not consistently engage with the monitors, especially if they do not believe it is their responsibility to solve the problems identified. Some duty-bearers were not willing to pressure subcontractors to fix problems, which negatively impacted monitors' trust and limited their understanding of who is ultimately responsible for problem resolution.

Afghanistan

- Mutual Trust AND Human Capacity work closely together in the Afghan context. Informed-led Citizen Action is less relevant.
- Monitors and school principals have strong levels of mutual trust. The monitors of Integrity Clubs highlighted that principals are trustworthy and consistently engage with them to identify any problems that need fixing. Principals accept full responsibility for the school but are not always able to solve the problems themselves due to the scale of the problem.
- The governance system of the education sector makes it difficult for monitors to know who is directly responsible. Monitors consistently reported that they did not always understand who was responsible for solving the problems reported. Although the school principal accepts responsibility for the school, problems that are at a larger scale and require input from the MoE often remain unsolved.

- The scale of the problem often influenced problem resolution. Smaller-scale problems which could be resolved at the level of the principal and the Directorate were more likely to be solved. Larger-scale problems that were believed to be systemic and indicative of the lack of prioritisation by the MoE remained unsolved.

RQ3: What learning can be generated for Integrity Action's programming?

- The initiatives implemented by Integrity Action all play an important role in achieving problem resolution. Integrity Clubs, monitors, JWGs and the DevCheck software were all highlighted by stakeholders to be critical in enabling problem resolution. These initiatives are all directly relevant to the factors that have been identified as crucial to achieve problem resolution.
- The three overarching features underpinning Integrity Action's Theory of Change and approach – incentives to act with, and demand, integrity; and mutual trust and information that gives citizens leverage – are very relevant to catalyse problem resolution and should continue to guide future delivery of social accountability initiatives.
- This research has found that monitors' perception of who is responsible and the human capacity of duty-bearers are important factors that enable problem resolution. Integrity Action could, therefore, engage in further work to strengthen duty-bearers' capacity and build knowledge across all stakeholders regarding roles and responsibilities. Working with local partners in target countries to engage in capacity building activities with relevant stakeholders would further strengthen Integrity Action's contribution to the process of problem resolution.

Recommendations

The perception of who was ultimately responsible for solving problems was identified as an important factor for problem resolution. In some contexts where lines of accountability are not clear, Integrity Action's partners are well placed to support duty-bearers and monitors in ensuring the right stakeholders are targeted to be included in problem resolution processes and to build knowledge of who is responsible.

> **Recommendation 1:** Integrity Action's in-country partners should work with monitors and duty-bearers to identify and target specific duty-bearers that need to be engaged to resolve problems.

The proximity of duty-bearers to citizens positively impacts problem resolution. Where governance systems enable duty-bearers to be integrated with communities, mutual trust can be built, which catalyses collaboration. In contexts where duty-bearers are not localised, JWGs offer a viable alternative to help develop a collaborative relationship between citizens and duty-bearers.

> **Recommendation 2:** When engaging in contexts where governance systems do not allow for duty-bearers to be integrated into communities, Integrity Action should use Joint Working Groups to encourage frequent and collaborative meetings between stakeholders.

The capability of duty-bearers to engage with monitors to fix problems is critical for problem resolution. However, in some cases, duty-bearers do not consistently possess these capabilities. Integrity Action could work to build capability through increasing understanding of responsibilities and the benefits of integrating citizen engagement throughout all service provision.

> **Recommendation 3:** Integrity Action should consider how it can build the capabilities of duty-bearers to engage with monitors more consistently, by building knowledge of their responsibilities and highlighting the benefits of engaging with citizens throughout the provision of services.

References

Baptist, C. and Befani, B. (2015) *Qualitative Comparative Analysis – A Rigorous Qualitative Method for Assessing Impact*, Coffey, link.

Björkman, M. and Svensson, J. (2009) "Power to the People: Evidence from a Randomized Field Experiment on Community-Based Monitoring in Uganda", *Quarterly Journal of Economics*, link.

Boydell, V., McMullen, H., Cordero, J., Steyn, P. and Kiare, J. (2019) "Studying social accountability in the context of health system strengthening: innovations and considerations for future work", *Heath Research Policy and Systems*, link.

Claasen, M. and Alpín-Lardiés, C. (eds) (2010) *Social Accountability in Africa: Practitioners' Experience and Lessons*, link.

Cragun, D., Pal, T., Vafaparampil, S.T., Baldwin, J., Hampel, H. and DeBate, R. D. (2015) "Qualitative Comparative Analysis: A Hybrid Method for Identifying Factors Associated with Program Effectiveness", *Journal of Mixed Methods Research*, link.

Fox, J. (2015) "Social Accountability: What Does the Evidence Really Say?", *World Development*, link.

Grandvoinnet, H., Aslam, G. and Raha, S. (2014) *Opening the Black Box: Contextual Drivers of Social Accountability Effectiveness*, World Bank, link.

Joshi, A., (2013) "Do They Work? Assessing the Impact of Transparency and Accountability Initiatives in Service Delivery". *Development Policy Review*, link.

Joshi, A. and Houtzager, P. (2012) "Widgets or Watchdogs?", *Public Management Review*, link.

Legewie, N. (2013) "An Introduction to Applied Data Analysis with Qualitative Comparative Analysis (QCA)", *Forum: Qualitative Research*, link.

Mainwaring, S. and C. Welna (eds) (2003) *Democratic Accountability in Latin America*, link.

McGee, R. and Gaventa, J. (2011) "Shifting Power? Assessing the Impact of Transparency and Accountability Initiatives", *IDS Working Papers*, link.

Michie, S., van Stralen, M. M., West, R. (2011) "The behaviour change wheel: A new method for characterising and designing behaviour change interventions", *Implementation Science*, link.

Ngulube T., Mdhluli L., Gondwe K. and Njobvu C. A. (2004) "Discussion paper 21: Governance, participatory mechanisms and structures in Zambia's health system: An assessment of the impact of Health Centre Committees (HCCs) on equity in health and health care", *EQUINET Discussion paper series*, link.

O'Donnell, G. (1998) "Horizontal Accountability in New Democracies", *Journal of Democracy*, link.

Ragin, C. (1987) *The Comparative Method*. Berkeley: University of California Press.

Ragin, C. (2000) *Fuzzy-Set Social Science*. Chicago: Chicago University Press.

Ragin, C. (2007) "Qualitative Comparative Analysis Using Fuzzy Sets (FsQCA)", in *Configurational Comparative Methods* (eds) Rihoux, B. and Ragin, C. London: Sage.

Ragin, C. (2017) *User's Guide to Fuzzy-Set / Qualitative Comparative Analysis*, link.

Ringold, D., Holla, A., Koziol, M. and Srinivasan, S. (2012) *Citizens and Service Delivery: Assessing the Use Of Social Accountability Approaches In The Human Development Sectors*, World Bank, link.

Schneider, C. and Rohlfing, I. (2013) "Combining QCA and Process Tracing in Set-Theoretic Multi-Method Research", *Sociological Methods and Research*, link.

Schneider, C. and Wagemann, C. (2006) "Reducing complexity in Qualitatives Comparative Analysis (QCA): Remote and proximate factors and the consolidation of democracy", *European Journal of Political Research*, link.

Waddington, H., Sonnenfeld, A., Gaarder, M. and Stevenson, J. (2019) *Does incorporating participation and accountability improve development outcomes? Meta-analysis and framework synthesis*, 3ie, link.

Wagemann, C. and Schneider, C. (2007) *Standards of Good Practice in Qualitative Comparative Analysis (QCA) and Fuzzy-Sets*, Compass, link.

Yimenu, E. B. (2011) *Social Accountability Mechanisms in Enhancing Good Governance*, link.

Annex 1: Methodological Approach

The below annex corresponds to the methodology section (Section 3) of the report. Each step detailed in Section 3 of the report is developed further in this annex. The iterative approach of the analysis is described in detail in Section 5 of this annex.

1. Outcome

The outcome identified is the resolution of a problem raised by a citizen. As highlighted in the Section 3 of the report, the outcome was changed from binary to a fuzzy-set scale to reflect the variations of problem resolution across the cases. The corresponding scores and definitions are provided in Table 1 below.

Table 1: Outcome fuzzy-set scoring

Score	Scoring definition
1	Fully solved
0.8	The original problem was identified and although an unforeseen difficulty was encountered which caused halt or delay, the project is now well underway to being solved, just later than expected.
0.6	The original problem was identified but, when trying to solve the problem, an unforeseen difficulty was encountered which delayed or halted the project, but an appropriate solution to overcome the difficulty has been identified.
0.4	The original problem was identified but, when trying to solve the problem, an unforeseen difficulty was encountered. There has been exploration of solutions but an appropriate one has not been identified and therefore the delay has persisted.
0.2	The original problem was identified but, when trying to solve the problem, an unforeseen difficulty was encountered, there has been insufficient exploration to overcome the difficulty and solve the problem.
0	No progress made to solve the original problem – duty-bearer not taking responsibility to fix it or wider financing issues hindering any progress.

2. Cases

The table below presents the original 32 cases used throughout the study. A summary of each case is provided, along with the relevant country and outcome score per case.

Table 2: Summary of cases and respective outcome scores

Country	CaseID	Name	Overview	Outcome score
Kenya	**MBWS1**	Drilling of Mkwakwani Borehole Water Supply	The Project had stalled due to lack of adequate and timely supply of construction materials by the Contractor. The contractor was using substandard (soft wood) materials instead of the high standard (hard wood) timber for roofing contrary to the prescription in the Bill of Quantities (BQ).	1

Country	CaseID	Name	Overview	Outcome score
	MBWS2	Drilling of Mkwakwani Borehole Water Supply	Lack of Project Management Committee attached to the construction project.	0.6
	MHS1	Construction and Rehabilitation of Majimoto Hot springs ecosystem	There was no Project Implementation Committee in place to ensure that the contractor was delivering on the work for which he was contracted.	1
	MHS2	Construction and Rehabilitation of Majimoto Hot springs ecosystem	The project construction delayed due the failure by the Contractor who then absconded from the work. This problem was delayed and just recently solved after the county government intervened and contracted a new service provider.	0.8
	CGECDE1	Construction of Ganze ECDE	The construction of the ECDE had been completed but learning activities had not resumed because the parents did not feel confident to take the children back to school.	1
	CGECDE2	Construction of Ganze ECDE	The monitors noticed that the contractor was delivering low-quality doors that were not specified in the Bill of Quantities (BQs). Both issues were raised with the Duty-bearer who followed up the matter with both the parents and the contractor.	0.8
	RCVV1	Construction of the Collection Rice Centre at Vanga Village	There was a risk that construction materials including for example the generator were too exposed and risk being stolen. The Contractor had not provided for the security of the construction material and critical equipment like the power generator. This risk for theft was therefore too high.	1
	RCVV2	Construction of the Collection Rice Centre at Vanga Village	The contractor was expected to finish the construction work in good time so that electricity can be installed. The Kenya Power and Lighting Company (KPLC) has not installed electricity. The problem not resolved. The installation of electricity has not been effected, i.e. not installed. The blame is placed on the contractor who has been slow in delivery of his terms of duty which included finalization of the construction of the Rice Collection Centre	0.6
	CMECDE1X	Construction of Magwagaru ECDE	The Monitors identified that the Contractor was using faulty roofing materials i.e., low-quality Pole-vaults thus compromising the stability and integrity of the ECDE. The contractor used poor quality metal as pole-vaults hence prompting the building to be weak in terms of support.	1
	CMECDE2X	Construction of Magwagaru ECDE	The monitors identified by use of the DevCheck the problem of the pit latrine whose digging/depth remain shallow i.e., not to the required specification.	0.4
	CDECDE1	Construction of ECDE Dzivani	The Monitors identified that the Contractor was using faulty roofing materials i.e., low-quality soft wood timber instead of the high-quality hard wood timber specified in the Bill of Quantities (BQs).	1

Country	CaseID	Name	Overview	Outcome score
	CDECDE2	Construction of ECDE Dzivani	The monitors identified by use of the DevCheck the problem of the pit latrine whose digging/depth remain shallow i.e., not to the required specification.	0.4
	CMECDE1	Construction of Mtsahuni ECDE	For the project to proceed, the contractor needed to have cleared the bush. The bush was inhibiting the workers from accessing the project site in part because it was full of thorns. Workers safety was compromised due to the bush on the project site. This problem was solved.	1
	CMECDE2	Construction of Mtsahuni ECDE	The contractor supplied faulty posts (pole vaults). They were too short and of low quality i.e., not according that which was specified in the Bill of Quantities (BQs). This problem has not been solved.	0.2
	CMPS1	Construction of Mnyenzeni Primary School	Monitors identified that the Contractor had significantly delayed the delivery of construction materials. The contractor was identified as being slow in delivering construction materials and this problem was reported to the duty-bearer.	0.8
	CMPS2	Construction of Mnyenzeni Primary School	Related to the delay in the delivery of construction materials is the delay in the finalization of the project. The construction project is 3 months behind the timelines. The monitors identified this problem and alerted the duty-bearers.	0.8
Palestine	QFC1	Qalqiliah Females Club	The club noticed that there are no entrances for people with disabilities in the construction plan for this park.	1
	QFC2	Qalqiliah Females Club	During work there was a presence of iron bars, block bricks and very dangerous materials at the construction site, which is a zoo that is visited by dozens of children daily.	0
	ACF1	Ateel Club for Females	A rainwater collection network had a large pit located at the exit of the network and it is close to a secondary school and children's playground and it was dangerous to children	1
	ACF2	Ateel Club for Females	There was leftover excess materials of the rainwater collection network (big pipes) on the roadside which was also exposed to citizens and children.	0
	TCF1	Tulkarem Club for Females	Pedestrian lines were not drawn nor warning signs were put in front of a primary school in the reformed street.	1
	TCF2	Tulkarem Club for Females	Sidewalks were not established for the reformed street in Tulkarem	0
	TCM1	Tulkarem Club for Males	The presence of some large equipment and devices on the roofs of buildings, which obstructed the work of the contracting company. And the need to do cleaning and preparation of the buildings' roofs before installing the solar energy cells.	1

Country	CaseID	Name	Overview	Outcome score
	TCM2	Tulkarem Club for Males	The delay in completing the project and not adhering to the timetable for completing it. The reason is the difficulty in entering the and delay of some materials, due to the difficult procedures faced by companies importing materials by the occupation regarding the issue of seizing imported materials for Palestinians at Israeli customs	0.2
Afghanistan	HSS1	Anonymous Secondary School	The first issue that had been solved was related to water storage and water filtration issues. Students had complained about the lack of clean water in schools, in early 2019; this was corroborated by SHINE monitors. The issue was solved by the school administration and Integrity Club members working together to launch a fundraising campaign to invite donations. The campaign was successful and the water storage and filter were built.	1
	HSS2	Anonymous Secondary School	There was a lack of textbooks in schools, but this issue remained unsolved. The issue was reported to the Ministry of Education (MoE) and the Directorate of Education (DoE). The monitor highlighted though that it was not a problem specific to the school, but a nation-wide problem – many schools in Afghanistan lacked adequate resources to enable high quality learning.	0
	MRS1	Anonymous High School	Students were unable to use the toilets due to their dilapidated and unsafe conditions, with the walls being very low and kept falling down. The number of toilets were also insufficient for the number of students attending the school. The problem was solved by the bathrooms being rebuilt and the walls built higher.	1
	MRS2	Anonymous High School	The unsolved problem was regarding the need for a conference hall for trainings and events for the school. The conference hall has still not yet been built. The duty-bearer and the monitor both reported that India had promised to provide the funds to build the conference hall, so the issue has a solution, but it will need time to implement as construction was halted due to COVID-19.	0.6
	QMOS1	Anonymous High School	The monitor recognised that the school has 1,260 students and there were only 4 toilets. The hygiene was not to an adequate standard and there was a likelihood of disease outbreak in the community. The school also needed to be painted.	1
	QMOS2	Anonymous High School	There was not enough clean drinking water for the students and the likelihood of disease outbreak was imminent.	0
	WS1	Anonymous Secondary School	The monitor identified that there the school toilets were not usable and the walls around the toilets were collapsing. The monitor identified the problem in 2019 and reported it to the school management through the JWG. The provincial office was also engaged in these discussions.	1

Country	CaseID	Name	Overview	Outcome score
			The walls have now been rebuilt and the toilets can be used.	
	WS2	Anonymous Secondary School	The problem that is outstanding is the lack of classrooms. The monitor reported that the school is overcrowded and some of the students take their classes outside. This problem has been shared with the DoE but has not yet been solved.	0

3. Conditions

The full list of conditions, with the corresponding definitions and hypotheses is provided in table below, organised by the COM-B model.

Table 3: Conditions and their corresponding definitions and hypotheses

Condition	Condition ID	Definition	Hypothesis
Capability			
1. **Financial resources**	Finres	Duty-bearers possessing sufficient financial resources.	Financial resources increases the ability to make significant changes to service delivery.
2. **Human capacity**	Humcap	Duty-bearers possessing adequate human capacity to engage with citizens. Duty-bearers understanding priorities of citizens.	Adequate human capacity increases likelihood that duty-bearers will respond to citizen voice.
Opportunity			
3. **Governance**	Gov	Openness of civic space, opportunities for citizens and duty-bearers to discuss and negotiate solutions.	In a closed civic space (often centralised governance system), duty-bearers have less opportunity to resolve problems and respond to citizen voice.
4. **Mutual trust**	Mutrust	Levels of trust between citizens and duty-bearers.	Existence of trust between citizens and duty-bearers will enable open discussions and the opportunity to engage in service delivery.
5. **Collaboration**	Collab	Level of collaboration between citizens and duty-bearers.	Citizens and duty-bearers have a synergistic or cooperative relationship that enables citizens to play an active role in service delivery, moving beyond the state-society dichotomies.
Motivation			
6. **Social incentives**	Socinc	Duty-bearers have social incentives to resolve problem (social norms, resolution of problem is shared).	Social norms and values can function as an important motivation for duty-bearers to deliver effective public services.

Condition	Condition ID	Definition	Hypothesis
7. **Political incentives**	PolInc	Duty-bearers have political incentives to resolve problem (upcoming elections, political credibility, etc).	Political benefits as a result of resolving problems can drive duty-bearers to respond to citizen-identified problems in service delivery.
8. **Financial incentives**	FinInc	Duty-bearers have financial/material incentives to resolve problems.	Monetary or material incentives can increase likelihood of duty-bearers resolving problems.
Behaviour			
9. **Informed citizen-led action**	Aoi	Citizen-led action that is informed and targeted.	Information of specific entitlements, legislation and rights will impact the action citizen's take and the motivation of duty-bearers to respond.
10. **Intensity or frequency of action**	Action	Level of intensity/frequency of citizen engagement.	The way in citizens engage with duty-bearers (confrontational or collaborative) and the regularity of this engagement.
11. **Issues with subcontractor** [12]	Subcon	Extent to which subcontractors have caused issues with projects.	Subcontractors that have caused issues with the delivery of a project (faulty construction materials etc) can become a barrier for duty-bearers to resolve problems.

4. Data collection

As we were reliant on qualitative data – and are conscious to capture the contextual differences of the causal conditions in each case – we have used fuzzy-set analysis. Every condition has been coded for each case, based on primary data through qualitative interviews with monitors and duty-bearers. The coding of the conditions was an iterative process as the qualitative data was analysed between cases and consistency between cases is vital. When analysing data from the two data points (citizen monitors and duty-bearers), we made judgement calls based on the evidence to accurately code each condition. Coding is firstly inputted into a data matrix which then highlights the differing causal pathways that lead (or do not lead) to the outcome. This is then inputted into QCA software to generate the truth table.

The below table details the scoring criteria for each scale of each condition.

Table 4: Scoring criteria for fuzzy scale of each condition

Condition	Scoring
Financial resources	**1:** Presence of very significant availability of and access to financial resources. The duty-bearer consistently prioritises and commits financial resources to projects. Ample financial resources to provide effective service delivery.
	0.8: Presence of high level of availability and access to financial resources. The duty-bearer has usually been able to prioritise and commit financial resources. There have been a few instances where lack of financial resources has impacted service delivery, but these instances tend to be rare.

---

[12] This factor was not identified through the literature and therefore not originally included, but was added following interviews with monitors and duty-bearers as it became clear many problems were caused by subcontractors involved in the project. In many cases, both monitors and duty-bearers reported that problems remained unsolved because of an error on the part of the subcontractor.

ECORYS ▲ Answering
tomorrow's
challenges
today

Condition	Scoring
	0.6: Some availability of and access to financial resources. The duty-bearer may not always prioritise and commit these resources to the project but do so for the majority of occasions. There have been several instances where lack of financial resources has impacted service delivery.
	0.4: The level of financial resources is fairly low, and there have been many instances where the duty-bearer has not been able to prioritise and commit these to the project.
	0.2: The level of financial resources is very low, and the duty-bearer is often not able to prioritise and commit finances to the project. They are aware that the lack of financial resources impacts service delivery.
	0: Do not possess any availability of or access to financial resources. The duty-bearer is not able to prioritise or commit financial resources to the project. They are aware that service delivery is always impacted by the lack of financial resources.
Human capacity	**1:** The duty-bearer possesses very high levels of human capacity. They have very high levels of skills, competency and training to effectively and meaningfully engage with monitors and the community. There are plenty of staff to provide oversight and manage service delivery.
	0.8: The duty-bearer possesses high levels of human capacity. They have high levels of skills, competency, training but sometimes it is a challenge for them to engage with monitors and the community effectively and meaningfully.
	0.6: The duty-bearer possesses some human capacity. There is some skill, competency and training but it is often the case that there is not enough staff to engage with monitors and the community.
	0.4: The level of human capacity is fairly low, and there have been many instances where the duty-bearer is not able to engage with monitors and the community.
	0.2: The level of human capacity is very low. Due to this, the duty-bearers finds it very difficult to engage with monitors and the community.
	0: the duty-bearer does not possess any available human capacity. Due to the lack of human capacity, they are unable to provide oversight or manage the project.
Governance	**1:** There are very adequate mechanisms for citizens to raises issues and there are many opportunities to engage with appropriate authorities. Citizens are very confident who is accountable and responsible for service delivery. There are very high levels of transfer of responsibilities to local government and authorities.
	0.8: There are adequate mechanisms for citizens to raises issues and there are some opportunities to engage with appropriate authorities. There are high levels of transfer of responsibilities to local government and authorities. Citizens are clear who is accountable and responsible for service delivery.
	0.6: Mechanisms for citizens to raises issues exist but these are not consistently effective ways to engage with authorities. There are moderate levels of transfer of responsibilities to local government and authorities. Citizens are not always clear who is accountable for service delivery and there is some confusion regarding accountability.
	0.4: Mechanisms for citizens to raises issues are lacking and these are often ignored by authorities. There are very limited opportunities to engage with appropriate authorities. There is often confusion regarding who is accountable and responsible for service delivery.
	0.2: Mechanisms for citizens to raises issues are severely lacking and there are very little opportunities to engage with authorities. Citizens do not know who is accountable and responsible for service delivery.
	0: There are no mechanisms for citizens to raise issues and authorities do not engage with citizens. Citizens do not know who is accountable and responsible for service delivery.
Mutual trust	**1:** There are very high levels of mutual trust between the duty-bearer and citizens. Both citizens and the duty-bearer have a strong relationship and engage with each other on a regular occurrence.
	0.8: There are high levels of mutual trust between the duty-bearer and citizens. The duty-bearer and citizens engage with each other, but this is not always consistent.
	0.6: Levels of mutual trust between the duty-bearer and citizens are moderate. Citizens and the duty-bearer have engaged with each other in relation to service delivery, but this is on an ad hoc basis and does not always lead to a positive outcome.

Condition	Scoring
	0.4: Levels of mutual trust are fairly weak between the duty-bearer and citizens. Both parties rarely engage with each other and the relationship is weak.
	0.2: Levels of mutual trust are very weak between the duty-bearer and citizens. Levels of constructive engagement are very low and the relationship often becomes adversarial.
	0: There is no mutual trust between citizens and the duty-bearer. Open discussions and constructive engagement never occurs and the relationship is consistently adversarial.
Collaboration	**1:** There are very high levels of collaboration between duty-bearer and citizens. Both citizens and the duty-bearer consistently work together to solve issues regarding service delivery. Their relationship is never confrontational and both parties regularly spend time and resources to solve issues together.
	0.8: There are high levels of collaboration between duty-bearer and citizens. Both citizens and the duty-bearer regularly work together to solve issues regarding service delivery. Their relationship is sometimes confrontational, but both parties often spend time and resources to solve issues together.
	0.6: There are moderate levels of collaboration between duty-bearer and citizens. Both citizens and the duty-bearer attempt to work together to solve issues regarding service delivery, but this often becomes confrontational and becomes a barrier in solving issues. Both parties sometimes spend time and resources to solve issues together.
	0.4: Levels of collaboration between duty-bearer and citizens are fairly weak. Citizens and the duty-bearer rarely attempt to work together to solve issues regarding service delivery and their relationship is confrontational. Both parties rarely spend time and resources to solve issues together.
	0.2: Levels of collaboration are very weak between duty-bearer and citizens. Citizens and the duty-bearer never attempt to work together to solve issues regarding service delivery and their relationship is always confrontational and often becomes combative.
	0: Levels of collaboration are non-existent between duty-bearer and citizens.
Intensity and frequency of action	**1:** Very high levels of intensity and frequency of engagement. The monitor repeatedly raised the problem with the duty-bearer and spent a lot of time in advocating for the problem to be recognised. Wider support by other community members was very high which led to very intense engagement with the duty-bearer.
	0.8: High levels of intensity and frequency of engagement. The monitor raised the problem with the duty-bearer on several occasions and spent some time in advocating for the problem to be recognised. Wider support by other community members was high which led to intense engagement with the duty-bearer.
	0.6: Moderate levels of intensity and frequency of engagement. The monitor raised the problem with the duty-bearer more than a few times and spent a moderate amount of time in advocating for the problem to be recognised. Wider support by other community members was moderate.
	0.4: Fairly low levels of intensity and frequency of engagement. Only on a few occasions did the monitor raise the problem with the duty-bearer. Little amount of time was spent in advocating for the problem to be recognised. Intensity of engagement was fairly low due to little wider support from the community.
	0.2: Low levels of intensity and frequency of engagement. Very little engagement with the duty-bearer needed and very little amount of time spent in advocating for the problem to be recognised.
	0: No intensity and frequency of engagement. The amount of time was spent on advocating for the problem to be recognised by the duty-bearer was marginal. The level of resonance of the issue with citizens was marginal to non-existent.
Social incentives	**1:** Very high levels of social incentives and norms. There are very strict and very significant reputational consequences if duty-bearers are viewed as shirking their responsibilities. Societal consequences (e.g. exclusion by the community, ostracism at community events, perceived shame brought to the family name, and others) are very likely and will always occur.
	0.8: High levels of social incentives and norms. There are strict and significant reputational consequences if duty-bearers are viewed as shirking their responsibilities. Societal consequences (e.g. exclusion by the community, ostracism at community events, perceived shame brought to the family name, and others) are likely and will usually occur.

Condition	Scoring
	0.6: Moderate levels of social incentives and norms. There are some reputational consequences if duty-bearers are viewed as shirking their responsibilities. Societal consequences (e.g. exclusion by the community, ostracism at community events, perceived shame brought to the family name, and others) sometimes occur.
	0.4: Low levels of social incentives and norms. There are few reputational consequences if duty-bearers are viewed as shirking their responsibilities. Societal consequences (e.g. exclusion by the community, ostracism at community events, perceived shame brought to the family name, and others) occurs occasionally but are infrequent.
	0.2: Very low levels of social incentives and norms. There are very few reputational consequences if duty-bearers are viewed as shirking their responsibilities. Societal consequences (e.g. exclusion by the community, ostracism at community events, perceived shame brought to the family name, and others) occurs occasionally but are very infrequent.
	0: There are no social incentives and norms. There are very few reputational consequences if duty-bearers are viewed as shirking their responsibilities. Societal consequences (e.g. exclusion by the community, ostracism at community events, perceived shame brought to the family name, and others) do not occur.
Political incentives	**1:** Very high levels of political benefits for duty-bearers. Engaging with citizens very significantly contributes to duty-bearers being viewed as efficient and able to deliver effective services. Citizens can very easily trace back and attribute delivery of services to duty-bearers. The linkage between political benefits and outcomes is very clear and publicly observable.
	0.8: High levels of political benefits for duty-bearers. Engaging with citizens significantly contributes to duty-bearers being viewed as efficient and able to deliver effective services. Citizens can easily trace back and attribute delivery of services to duty-bearers. The linkage between political benefits and outcomes is clear and publicly observable.
	0.6: Moderate levels of political benefits for duty-bearers. Engaging with citizens partially contributes to duty-bearers being viewed as efficient and able to deliver effective services. Citizens can trace back delivery of services to duty-bearers, although this is not always immediately clear. The linkage between political benefits and outcomes is not always obvious and publicly observable.
	0.4: Low levels of political benefits for duty-bearers. Engaging with citizens rarely contributes to duty-bearers being viewed as efficient and able to deliver effective services. It is difficult for citizens to trace back and attribute delivery of services to duty-bearers.
	0.2: Very low levels of political benefits for duty-bearers. Engaging with citizens very rarely contributes to duty-bearers being viewed as efficient and able to deliver effective services. It is very difficult for citizens to trace back and attribute delivery of services to duty-bearers.
	0: No political benefits for duty-bearers. Engaging with citizens does not contribute to duty-bearers being viewed as efficient and able to deliver effective services. Citizens are not able to trace back and attribute delivery of services to duty-bearers.
Financial incentives	**1:** Very high levels of financial benefits. There are very high levels of financial or monetary advantages when duty-bearers provide effective service delivery.
	0.8: High levels of financial benefits. There are high levels of financial or monetary advantages when duty-bearers provide effective service delivery.
	0.6: Moderate levels of financial benefits. There are moderate levels of financial or monetary advantages when duty-bearers provide effective service delivery.
	0.4: Low levels of financial benefits. There are low levels of financial or monetary advantages when duty-bearers provide effective service delivery.
	0.2: Very low levels of financial benefits. There are very low levels of financial or monetary advantages when duty-bearers provide effective service delivery.
	0: No financial benefits. There are no financial or monetary advantages when duty-bearers provide effective service delivery.
Informed citizen-led action	**1:** Very high levels of access to information. Citizens are very well-informed about their rights and entitlements. Citizens can very easily access information regarding service delivery, entitlements and rights stored by duty-bearers. Citizens consistently use this to advocate for more effective service delivery. Freedom of Information Law exists and enables very easy access to information.

Condition	Scoring
	0.8: High levels of access to information. Citizens are well-informed about their rights and entitlements. Citizens can easily access information regarding service delivery, entitlements and rights stored by duty-bearers. Citizens often use this to advocate for more effective service delivery. Freedom of Information Law exists and enables easy access to information.
	0.6: Moderate levels of access to information. Citizens are informed about their rights and entitlements, but this is not consistent. Citizens can access information regarding service delivery, entitlements and rights stored by duty-bearers but sometimes are confronted with obstacles. Citizens sometimes use this to advocate for more effective service delivery. Freedom of Information Law exists but does not always lead to access to information.
	0.4: Low levels of access to information. Citizens know they have some rights and entitlements to quality standards but are uninformed about specifically what these rights and standards constitute. Citizens struggle to access information regarding service delivery, entitlements and rights stored by duty-bearers and are often confronted with obstacles. Citizens rarely use this to advocate for more effective service delivery. Freedom of Information Law exists but rarely leads to access to information.
	0.2: Very levels of access to information. Citizens are, on the whole, uninformed regarding rights and entitlements. Citizens always struggle to access information regarding service delivery, entitlements and rights stored by duty-bearers and are always confronted with obstacles. Citizens very rarely use this to advocate for more effective service delivery. Freedom of Information Law does not exist and this is a key challenge for access to information.
	0: No access to information. There is no information available for citizens to be informed regarding rights and entitlements. Citizens are not able to access information regarding service delivery, entitlements and rights stored by duty-bearers. Citizens are not able to use this to advocate for more effective service delivery. Freedom of Information Law does not exist.
Issue with subcontractor	**1:** The subcontractor has not caused any issues and has adequately responded to any issues arising when delivering services or the subcontractor is not a relevant delivery partner.
	0.8: The subcontractor has not caused any issues but there are unforeseen issues when delivering the services that need to be overcome by the subcontractor.
	0.6: The subcontractor has caused some issues when delivering services, but these have been resolved by the subcontractor.
	0.4: The subcontractor has caused issues when delivering services; some have been resolved but some remain outstanding.
	0.2: The subcontractor has caused issues which remain outstanding.
	0: The subcontractor has caused fundamental issues – another subcontractor is now needed.

5. Analysis

In this section we present the steps taken to complete the analysis; this includes our truth table, our full results (the parsimonious, intermediate, and complex solutions), the results/ details of the robustness checks that we conducted, and information on the steps of the iterative process whereby we moved between software analysis and within-case analysis multiple times.

5.1 Descriptive statistics

Table 5: Descriptive statistics

Variable	Mean	Standard deviation	Minimum	Maximum
Financial resources	0.6866667	0.3748185	0	1
Human capacity	0.6733333	0.2897509	0.2	1
Governance	0.76	0.2751969	0.2	1
Mutual trust	0.7533333	0.2997036	0	1
Collaboration	0.7933333	0.2943165	0.2	1
Intensity and frequency of action	0.52	0.3745219	0	1
Social incentives	0.3066667	0.4090096	0	1
Political incentives	0.2	0.2966479	0	1
Financial incentives	0.06	0.1724336	0	0.8
Informed-led citizen action	0.7066667	0.3172101	0	1
Issues with subcontractor	0.6333333	0.3349959	0	1
Outcome (solved)	0.7	0.3785939	0	1

n=30 for all conditions

5.2 Truth table

Following calibration, the dataset is transformed into a **truth table** which displays every possible combination of the absence and presence of the conditions within the dataset, alongside the number of cases which are relevant to each pathway, and the **consistency score**. Consistency refers to the degree to which the cases covered by a pathway share the same outcome. A low consistency score (below 0.8 for fuzzy sets) signals that the data is likely to contain **contradictions**. Contradictory cases are those which have the same scores (or very similar) for each condition, but different outcomes. The researcher should remove contradictions from the dataset by either: (a) re-evaluating the scoring system and/or confirming all scores are correct, (b) deleting one of the cases if it is determined that it should not be present, or (c) adding a new condition in which the two cases differ, so that they no longer contradict. Our analysis utilised all three of these approaches:

(i)   During our first round of analysis, many cases contradicted with the other case of the same project. To overcome this, we began by reviewing all of our scores to ensure consistency between cases, and definitions for certain intervals were tightened. Following on from this, we also changed our outcome from crisp to fuzzy scoring to better reflect the nuances present in our case studies. This removed many of the contradictions and also dramatically improved our solution coverage and consistency scores.

(ii)   In order to remove further contradictions, an 'issues with subcontractor' condition was added to reflect the significant issues that subcontractors caused in many of the cases.

(iii)   In turn, there were two contradictory cases outstanding - QMOS2 and CMECDE2; we deleted these cases from our analysis because this was the final approach that remained. We used within-case analysis and re-running the analysis with these cases as well as their counterparts (QMOS1 and CMECDE1) deleted separately to determine that QMOS2 and CMECDE2 were outliers which were skewing the solutions.

After the researcher has removed contradictions, they must select a minimum value for consistency and cases (the number of the cases relevant to each pathway) to be included in the next stage of the analysis. Best practice suggests a consistency score of at least 0.8, and a case number of at least 1 – these are the values that we used, and below is our truth table after the pathways that did not meet this criterion had been deleted.

Table 6: Truth Table

Subcontractor	Information	FinInc	PolInc	SocInc	Action	Collab	MutTrust	Gov	HumCap	FinRes	Cases	Solved	Raw consistency
1	1	0	0	0	1	1	1	1	1	1	4	1	0.9630
0	1	0	0	0	1	1	1	1	1	1	3	1	0.9630
1	1	0	0	0	0	1	1	1	1	1	3	1	0.9570
1	1	0	0	0	1	1	1	0	0	1	2	1	0.9091
1	1	0	1	1	1	1	1	1	1	1	1	1	0.8889
1	1	0	0	1	1	1	1	1	1	0	3	1	0.8750
0	1	0	0	0	0	1	1	1	1	1	1	1	0.8400
1	1	0	0	1	0	1	1	1	0	1	1	1	0.8000
0	1	0	1	1	1	1	1	1	1	1	1	1	0.8000

Logical minimization is used to identify the simplest (or minimal) expression that can achieve the outcome – redundant elements are deleted; if the solution contains two pathways that differ but just a single condition, that condition can be deleted. For example, if the solution contains both A*B*C and A*~B*C, minimization will produce the reduced pathway A*C. The minimum expressions found are known as **prime implicants**. It may be possible to further reduce the prime implicants – these are known as '**logically tied**' prime implicants. If this is the case, the researcher is able to select the logically tied prime implicants they wish to analyse based upon their own theoretical knowledge and their understanding of the cases and/or conditions. Our analysis identified four logically tied prime implicants (the four pathways presented in the parsimonious solution below). Because the solutions were easy to interpret, we decided to select all four prime implicants and conduct within-case analysis to determine which were the most relevant, rather than deleting any of the prime implicants at this stage.

5.3 Sufficiency analysis

Three solutions will be generated which display different pathways that are sufficient for achieving the outcome: **complex**, **intermediate**, and **parsimonious**. The solutions differ in how they approach **logical remainders**, which are pathways within the true table for which there are no relevant cases. The complex solution treats all remainder as false (meaning that they are excluded) and is therefore the most 'conservative' solution, which will include them most conditions. The intermediate solution uses only remainders which are 'easy' counterfactuals, 'easy' versus 'difficult' refers to the strength of the evidence (from the pool of cases we have data for)[13]; it is therefore regarded as a 'middle-ground' between the complex and parsimonious solutions. Finally, the parsimonious solution uses all remainder which will generate a logically simpler solution, making it the most 'liberal' estimate, but also the easiest to interpret, since it will contain the smallest number of conditions.

Within our analysis, the intermediate solution remained too complex to interpret in a manner that would be constructive for our research. Thus, we focused upon the parsimonious solution for our within-case analysis. However, for the sake of transparency, all three solutions are found below.

Parsimonious solution

Our parsimonious solution provided a **solution coverage of 0.867** and a **solution consistency of 0.860**. The pathways generated, and their corresponding coverage and consistency scores were as follows:

---

[13] For instance, given that the truth table has cases for ABC~D but not ABCD, if we have theoretical reasons for believing that the presence of D (not the absence) should contribute to the outcome, if ABC~D leads to the outcome, we could argue ABCD would, too – this is an easy counterfactual, and this information could be used to minimize the expression to ABC. In contrast, if we had cases for ABCD and not ABC~D (with the belief that the presence of D is positive for the outcome), ABC~D would be a difficult counterfactual and minimizing the expression to ABC would be less compelling (Cooper et al, 2014 discussing Ragin, 2008).

ECORYS ▲ | Answering tomorrow's challenges today

Table 7: Parsimonious solution pathways and their respective raw coverage, unique coverage and consistency scores

Solution	Raw coverage	Unique coverage	Consistency
Informed Citizen-led Action AND Human Capacity	0.704	0	0.902
Mutual Trust AND Human Capacity	0.752	0	0.887
Mutual Trust AND Financial Resources	0.723	0	0.863
Informed Citizen-led Action AND Collaboration AND Financial Resources	0.657	0	0.92
(Not) Political Incentives AND Social Incentives AND Collaboration [14]	0.219	0	0.92
(Not) Political Incentives AND Intensity and Frequency of Action AND Collaboration	0.58	0	0.938
(Not) Financial Incentives AND Governance AND Human Capacity	0.752	0	0.887

Intermediate solution

Solution coverage: 0.7048

Solution consistency: 0.9136

Table 8: Intermediate solution pathways and their respective raw coverage, unique coverage and consistency scores

Solution	Raw coverage	Unique coverage	Consistency
Issues with Subcontractor AND Informed Citizen-led Action AND Intensity and Frequency of Action	0.342	0.028	0.947

---

[14] The absence of a condition in a pathway is noted by QCA using the ~ sign. We have replaced this sign with 'not' for ease.

AND Collaboration AND Mutual Trust AND Financial Resources			
Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Governance AND Human Capacity AND Financial Resources	0.571	0.247	0.923
Issues with Subcontractor AND Informed Citizen-led Action AND Social Incentives AND Collaboration AND Mutual Trust AND Governance AND Financial Resources	0.104	0	0.916
Issues with Subcontractor AND Informed Citizen-led Action AND Social Incentives AND Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Governance AND Human Capacity	0.180	0.09	0.904

Complex solution

Solution coverage: 0.6762

Solution consistency: 0.9221

Table 9: Complex solution pathways and their respective raw coverage, unique coverage and consistency scores

Pathway	Raw coverage	Unique coverage	Consistency
Informed Citizen-led Action AND (Not) Financial Incentives AND (Not) Political Incentives AND (Not) Social Incentives AND Collaboration AND Mutual Trust AND Governance AND Human Capacity AND Financial Resources	0.4857	0.4095	0.9107
Informed Citizen-led Action AND (Not) Financial Incentives AND Political Incentives AND Social Incentives AND Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Governance AND Human Capacity AND Financial Resources	0.0857	0.0381	0.9000
Issues with Subcontractor AND Informed Citizen-led Action AND (Not) Financial Incentives AND (Not) Political Incentives AND (Not) Social Incentives AND Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND (Not)	0.0952	0.0190	0.9091

Governance AND (Not) Human Capacity AND Financial Resources			
Issues with Subcontractor AND Informed Citizen-led Action AND (Not) Financial Incentives AND (Not) Political Incentives AND Social Incentives AND (Not) Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND (Not) Governance AND (Not) Human Capacity AND Financial Resources	0.0381	0.0190	0.8000
Issues with Subcontractor AND Informed Citizen-led Action AND (Not) Financial Incentives AND (Not) Political Incentives AND Social Incentives AND Intensity and Frequency of Action AND Collaboration AND Mutual Trust AND Governance AND Human Capacity AND (Not) Financial Resources	0.1333	0.0857	0.8750

Outcome absence robustness check

When using QCA, the researcher should not assume that the outcome is symmetrical (in that the reverse of the conditions that lead to the outcome should lead to the absence of the outcome). It is therefore best practice to separately run the analysis solved for the absence of the outcome. Below are the results of this analysis; the solutions reveal that, within our data, there is in fact a strong degree of symmetry, and therefore no further within-case analysis was necessary.

Parsimonious solution

Solution coverage: 0.3333

Solution consistency: 0.6000

Table 10: Parsimonious solution pathways and their respective raw coverage, unique coverage and consistency scores

Pathway	Raw coverage	Unique coverage	Consistency
(Not) Informed Citizen-led Action AND (Not) Social Incentives AND Governance	0.3333	0	0.6000

Intermediate solution

Solution coverage: 0.2000

Solution consistency: 0.6429

Table 11: Intermediate solution pathways and their respective raw coverage, unique coverage and consistency scores

Pathway	Raw coverage	Unique coverage	Consistency
(Not) Issues with Subcontractor AND (Not) Informed Citizen-led Action AND Financial Incentives AND (Not) Social Incentives AND (Not) Intensity and Frequency of Action AND (Not) Mutual Trust	0.1333	0.0222	0.7500

Pathway			
(Not) Issues with Subcontractor AND (Not) Informed Citizen-led Action AND (Not) Social Incentives AND (Not) Intensity and Frequency of Action AND Collaboration AND (Not) Mutual Trust	0.1778	0	0.6154
(Not) Issues with Subcontractor AND (Not) Informed Citizen-led Action AND (Not) Social Incentives AND (Not) Intensity and Frequency of Action AND (Not) Mutual Trust AND Governance	0.1778	0	0.6667

Complex solution

Solution coverage: 0.1111

Solution consistency: 0.8333

Table 12: Complex solution pathways and their respective raw coverage, unique coverage and consistency scores

Pathway	Raw coverage	Unique coverage	Consistency
(Not) Issues with Subcontractor AND (Not) Informed Citizen-led Action AND Financial Incentives AND Political Incentives AND Social Incentives AND (Not) Intensity and Frequency of Action AND Collaboration AND (Not) Mutual Trust AND Governance AND Human Capacity AND Financial Resources	0.1111	0.1111	0.8333

The concept of membership is represented visually in Figures 1 and 2. Here, the two parsimonious pathways that we concluded to be the most 'relevant' are plotted against the outcome variable. As previously mentioned, membership in the outcome requires that the condition score (or the lowest condition score if the pathways contains multiple conditions) must be less than or equal to the outcome. Thus, graphically, this means that the plots should be either on or above the diagonal – the larger the number of cases which are below or equal, the higher the consistency score will be.

Figure 1: Informed Citizen-led Action and Human Capacity against outcome score
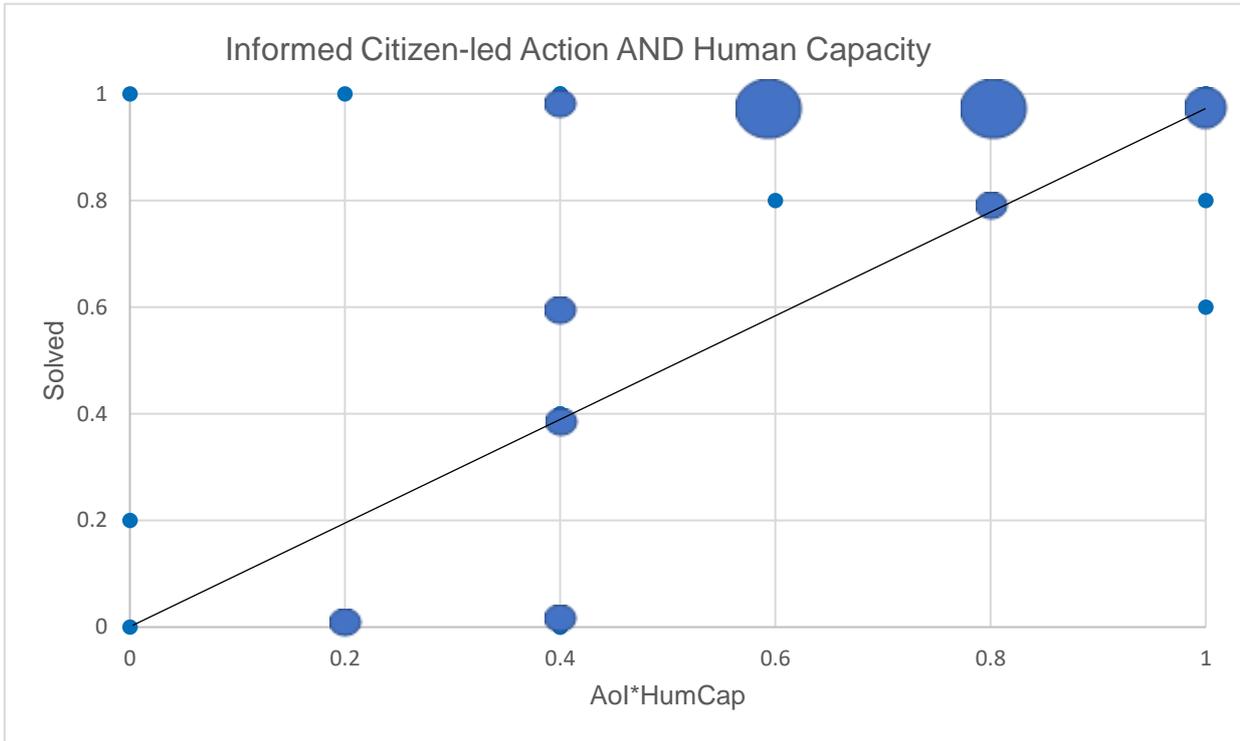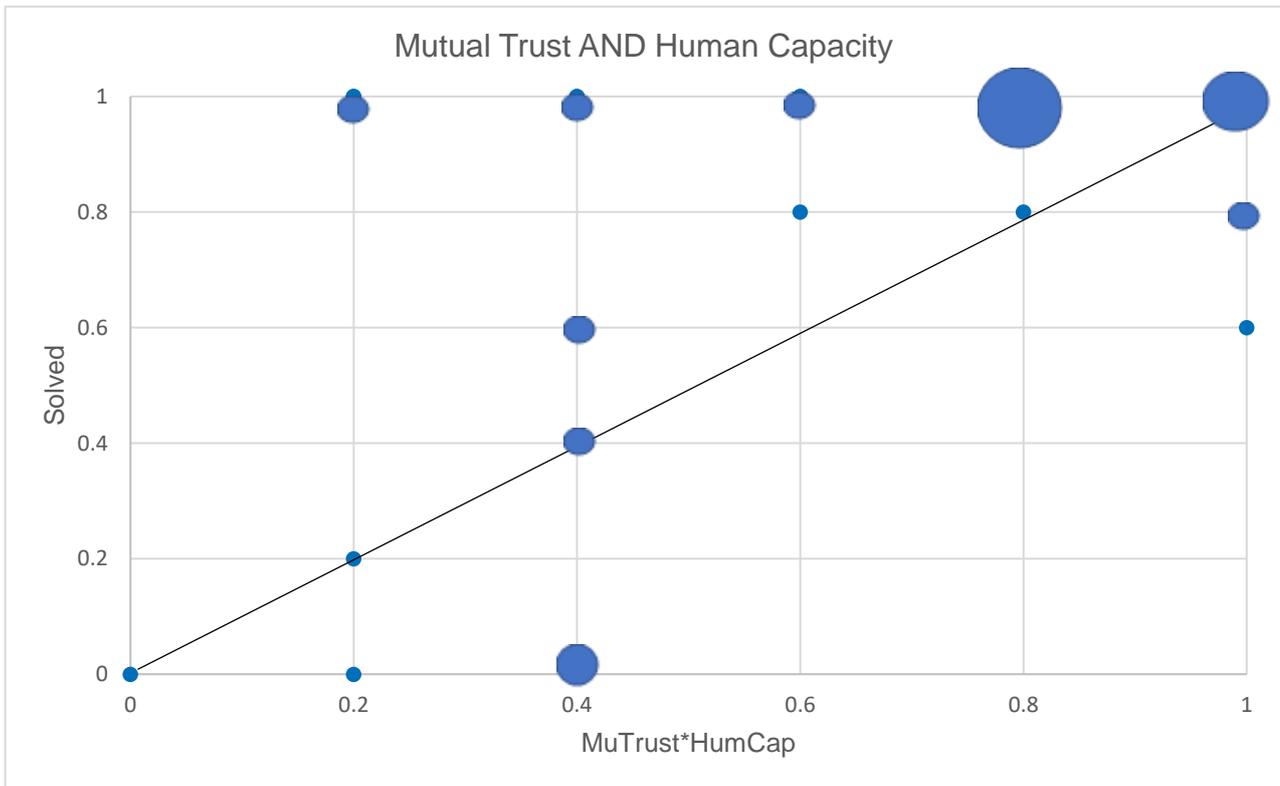
Figure 2: Informed Citizen-led Action and Human Capacity against outcome score

The size of the plot represents the number of cases depicted by that particular plot – for instance, there are four cases with a Mutual Trust and Human Capacity membership score of 1 and an outcome of 1.

Key:

Size of plot	Number of cases
•	1
●	2
●	3
●	4
●	5

5.4 Necessity analysis

The results of our necessity analysis can be found in the table below. Generally, a consistency score of 0.8 is used to describe a condition as 'typically necessary' (Rohlfing and Schneider, 2013). Within our results collaboration, human capacity, governance, mutual trust, and informed citizen-led action, as well as the absence of financial incentives and political incentives scored at least 0.8 for consistency. However, the incentive conditions display high consistency scores due to their lack of diversity, rather than because their absence is necessary. We were able to confirm this through our within-case analysis. Consequently, we re-ran our sufficiency analysis with these conditions deleted as a robustness check, however our results remained the same.

Table 13: Necessity Analysis Results

	Solved		Unsolved	
	Consistency	Coverage	Consistency	Coverage
Financial resources	0.761905	0.776699	0.577778	0.252427
~Financial resources	0.266667	0.595745	0.488889	0.468085
Human capacity	0.809524	0.841584	0.600000	0.267327
~Human capacity	0.295238	0.632653	0.644445	0.591837
Governance	0.828571	0.763158	0.688889	0.271930
~Governance	0.209524	0.611111	0.400000	0.500000
Mutual Trust	0.876190	0.814159	0.577778	0.230089
~Mutual Trust	0.171429	0.486487	0.533333	0.648649
Collaboration	0.923809	0.815126	0.533333	0.201681
~Collabotration	0.095238	0.322581	0.511111	0.741936
Intensity and frequency of action	0.647619	0.871795	0.355556	0.205128
~Intensity and frequency of action	0.409524	0.597222	0.777778	0.486111
Social incentives	0.323809	0.739130	0.288889	0.282609
~Social incentives	0.685714	0.692308	0.733333	0.317308
Political incentives	0.171429	0.600000	0.333333	0.500000
~Political incentives	0.857143	0.750000	0.733333	0.275000
Financial incentives	0.028571	0.333333	0.155556	0.777778

ECORYS Answering tomorrow's challenges today

~Financial incentives	0.980952	0.730496	0.866667	0.276596
Informed citizen-led action	0.800000	0.792453	0.622222	0.264151
~Informed citizen-led action	0.257143	0.613636	0.511111	0.522727
Issues with subcontractor	0.685714	0.757895	0.644444	0.305263
~Issues with subcontrator	0.371429	0.709091	0.488889	0.400000

ECORYS | **90 Years** Answering tomorrow's challenges today

5th Floor
Queen Elizabeth House
4 St Dunstans Hill
London
EC3R 8AD

T: +44 (0) 207 444 4200
E: london@uk.ecorys.com

ecorys.com